Museum Library
QL
671
A88

WILSON ORNITHOLOGICAL CLUB
MAY 10 1948

MAY 5 1948

Audubon Field Notes

Published by the National Audubon Society in Collaboration with the U. S. Fish & Wildlife Service

48th CHRISTMAS BIRD COUNT

Volume II, No. 2 March 1948

AUDUBON FIELD NOTES

A bimonthly magazine devoted to the results of bird watching

Published by the National Audubon Society in Collaboration with the U. S. Fish & Wildlife Service

Editor — John W. Aldrich

ASSOCIATE EDITORS

Ludlow Griscom — *Season Summaries*
Elizabeth S. Manning — *Format*
Chandler S. Robbins — *Bird Distribution and Christmas Counts*
Robert E. Stewart — *Bird Populations*

EDITORIAL BOARD

Margaret B. Hickey
S. Charles Kendeigh
Jean M. Linsdale
Eugene P. Odum
Roger T. Peterson

•

AUDUBON FIELD NOTES is published bimonthly by the National Audubon Society. Subscription price is $2.00 per year for the U. S. A., $2.25 foreign. Single copies: Fall Migration (January), Winter Season (May), Spring Migration (July), Nesting Season (September) 25 cents per copy; Christmas Bird Count (March) 60 cents; Breeding-Bird Census (November) 40 cents.

AUDUBON FIELD NOTES regrets that it cannot continue subscriptions beyond date of expiration. Checks and money orders should be made payable to AUDUBON FIELD NOTES. Editorial offices, 1000 Fifth Avenue, New York 28, N. Y. Entered as second-class matter February 3, 1947, at the Post Office, New York, New York, under the Act of March 3, 1879.

Copyright 1948 by the National Audubon Society.

Postmaster: If undeliverable, please notify Audubon Field Notes on form 3578 at 1000 Fifth Avenue, New York 28, N. Y.

DIRECTORS OF NATIONAL AUDUBON SOCIETY: F. Cecil Baker, G. Lister Carlisle, Edward C. Childs, Mrs. Francis B. Crowninshield, J. R. Dymond, Guy Emerson, Ludlow Griscom, Mrs. Paul Moore, Mrs. Walter W. Naumburg, E. Laurence Palmer, Matthias Plum, Gardner D. Stout, Mrs. Carll Tucker, R. Gordon Wasson, Charles G. Woodbury.

OFFICERS: Robert C. Murphy, *Honorary President;* Ludlow Griscom, *Chairman of the Board;* R. Gordon Wasson, *Chairman, Executive Committee;* John H. Baker, *President;* Carl W. Buchheister, *Vice-President;* G. Lister Carlisle, *Secretary;* Guy Emerson, *Treasurer;* Irving Benjamin, *Assistant Treasurer.*

MEMBERSHIP in the National Audubon Society helps to support the cause of protection and conservation of wildlife, plants, soil and water which result in improved public health, greater public happiness, better public economic welfare and higher standards of living.

- Regular .....$ 5
- Sustaining 10
- Active 25
- Supporting .....$ 50
- Contributing 100
- Life 200

MARCH 1948

Vol. II, No. 2

•

Cover photograph of Christmas Bird Counters

•

CONTENTS

Forty-Eighth Christmas Bird Count 27

Bird Counts ..... 28 — 122

Summary of Largest Counts of Individuals 122

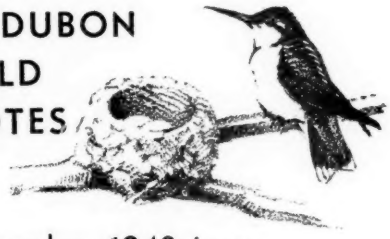
Revised Instructions for Making a Breeding Bird Census 126

Map Showing Distribution of Christmas Bird Counts 128

Index to Counts 128

Now is the time
to start planning your
Breeding Bird Census

AUDUBON
FIELD
NOTES



November 1948 issue

Revised

Instructions on page 126

Forty-Eighth Christmas Bird Count

DURING Christmas week of 1947 a record number of bird students cooperated in the 48th annual Christmas Bird Count. Although the number of reports printed is almost the same as last year, there was a 10 per cent increase in participants; and the total number of birds counted surpassed the peak year of 1944, when a count of more than 3,000,000 waterfowl at the Sacramento National Wildlife Refuge in California swelled the total to 5,490,000 individuals. The large count of the present season is due primarily to the red-wing concentration at Reelfoot Lake, Tenn.; this one species made up about 45 per cent of the 1947 total. A comparison with the counts of last year, and those of 5, 10, 20, 30 and 40 years ago will show the ever-increasing number of observers, and the rapidly improving quality of the reports.

Year	No. Reports Printed	Total Individuals	Total Observers	Largest No. of Species
1907	142	53,000	200	50
1917	145	139,000	240	106
1927	197	356,000	600	100
1937	184	852,000	1380	158
1942	250	3,570,000	1620	125
1946	316	1,928,000	3140	151
1947	314	5,573,000	3470	163

In the past 40 years the number of printed reports has slightly more than doubled; during the same time the number of participants has been increased 17-fold, and the number of individual birds counted has increased more than 100 times. Last year only 2 groups reported more than 100,000 individuals; this year 11 counts ran over that figure. Those above 200,000 were: Reelfoot Lake, Tenn., 2,012,655 (2,000,000 red-wings, 10,000 mallards); Nashville, Tenn. 633,589 (501,940 starlings, 125,940 robins); at sea off Monomoy Point, Mass., 309,209 (300,000 Am. eiders); Susquehanna Flats, Md., 255,557 (190,000 red-wings, 43,970 canvas-backs, 10,000 grackles); and Brussels, Ill., 205,830 (200,000 mallards).

Variety. — The number of counts reporting 100 species or more continues to grow in spite of the new policy of including only full species in the total. The Harlingen, Tex., observers identified 163 species, coming very close to the all-time record of 166 set by Santa Monica, Calif., in 1934. Second place with 149 species went to Los Angeles, Calif., and third with 134 species, to Charleston, S. C. Other counts of 100 or more were as follows: St. Augustine, Fla., 124; San Diego, Calif., 120; Santa Catalina Mts., Ariz., 117; Pasadena, Calif., 117; Wilmington, N. C., 115; St. Petersburg, Fla., 115; Malibu, Calif., 113; Cape May, N. J., 112; Monterey Peninsula, Calif. 110; Oakland, Calif., 107; Salinas, Calif., 105; Bronx-Westchester, N. Y., 101; Foley, Ala., 100; and Houston, Tex., 100. Credit should also be given to many other groups whose counts showed equally fine coverage of areas which contain many fewer species. Perhaps the best example of this is found in the lowest count of the year; the 3 observers who climbed Mt. Greylock, Mass., (the highest mountain in the state) under adverse walking conditions, recorded a total of 26 individuals of 6 species.

Observers. — Perhaps the most important factor contributing to the increasing value of the Christmas Counts is the superior coverage of an area due to the careful routing of many parties. Where most of the original Christmas Counts were made by single observers, the average number of participants is now 11 per area. The groups with the largest number of participants this year were the Audubon Society of Western Pennsylvania (Pittsburgh) with 84 observers, the Northampton, Mass., group with 67, the Oregon Audubon Society (Portland) and the Delaware Valley Ornithological Club (Cape May, N. J.) with 63 each, and the Hamilton (Ont.) Nature Club and the Audubon Society of the District of Columbia with 55 observers each.

Rarities. — The number of rare and accidental visitors on Christmas Counts appears to increase yearly. As usual there are a number of extraordinary reports which are not accompanied by sufficiently detailed descriptions; undoubtedly many of those which have received editorial comment represent reliable observations. The majority of the most unusual reports appear in the summary of largest counts of individuals on pages 122-125. The collecting of a gray-cheeked thrush at Cincinnati, Ohio, is one of the biggest surprises of the season, but unfortunately does not substantiate sight records of the olive-backed thrush at Davenport, Iowa, and Tulsa, Oklahoma. Among other extraordinary occurrences might be mentioned gannets at Hamilton, Ont., and Cleveland and Toledo, Ohio; a Cape May warbler at Lancaster, Ohio; a black-capped (Wilson's) warbler collected in southeastern Worcester Co., Md.; a white-winged crossbill at Charleston, S. C.; and grasshopper sparrows at Cincinnati and Oxford, Ohio.

General trends. — The number of late stragglers was even greater than last year. In the South an astonishing variety of warblers was recorded, and in the northeastern and north central states the numbers of eastern towhees, and white-throated and fox sparrows caused wide comment. A great many of these individuals disappeared in late December or January following the excessively heavy snows. There was a notable flight of razor-billed auks to the Massachusetts coast, and one individual was recorded as far south as Back Bay, Va. Other northern birds, such as the snowy owl, northern

shrike, red-breasted nuthatch, and all the northern finches, were exceedingly rare in the East, though quite common in parts of the West. A particularly heavy flight of the red-breasted nuthatch was recorded in California, 123 individuals being noted on the San Francisco count alone. The large number of white-crowned sparrow reports from northeast of the regular winter range of this species was of particular interest; in most cases these reports were well substantiated, and at several localities from 1 to a dozen or more individuals were trapped at banding stations which had not previously recorded the species in winter.

Editorial policy. — Two main changes have taken place this year in the editing of the reports. In the first place the rock dove was eliminated from all lists because there appeared to be no consistency in the reporting of this species. The interpretation of "truly wild existence" varied from one count to another, so that within a given area about half the observers included this species while the others did not.

The other change has been to use specific names throughout as far as possible. Nomenclature has followed the 1931 edition of the A.O.U. Check-list except in the few cases where the Check-list gives only sub-specific names. Easterners may rebel at the insertion of "yellow-shafted" in front of all their flickers, and all Westerners may not agree that Arkansas goldfinch and scrub jay are the best choice of specific name to represent the particular race which occurs in their localities. However, since most subspecies cannot be identified in the field even by the most expert observers, and since there are definite advantages of using the same name for a species throughout its range, this procedure has been adopted. Among other things it makes possible the accompanying summary of largest counts of individuals of each North American species. In the few cases where subspecies were reliably differentiated in the field, the counts for each race have been included in parentheses after the total for the species; and in the total at the end of each count the number of additional subspecies has been listed in parentheses following the specific total.

The editing of the 1947 Christmas Counts was a cooperative project wherein your regular editors were assisted by Messrs. Samuel A. Eliot, Jr., Philip A. DuMont, James O. Stevenson and Eugene P. Odum. Those largely responsible for editing counts from the various regions were as follows: Northwest (including the western half of Canada, and states south to and including Oregon, Idaho, Colorado and Kansas), J. W. Aldrich; Southwest, J. O. Stevenson; Midwest (south through Missouri and Indiana), P. A. DuMont; Ohio and foreign, J. W. Aldrich; eastern Canada, New York, and Pennsylvania, C. S. Robbins; New England, S. A. Eliot; Kentucky, West Virginia, Maryland, Delaware, New Jersey, and Virginia, R. E. Stewart; and Southeast, E. P. Odum.

Christmas Count Club. — Despite the announcement that the charge of ten cents per participant was being discontinued this year, many observers sent in contributions amounting to $97.74. Among the more generous gifts toward the publication of this issue was a contribution in the memory of Aaron C. Bagg who passed away on October 19; Mr. Bagg had been conducting the Holyoke, Mass., count for the past 32 years. — CHANDLER S. ROBBINS.

---

1. Frankfurt, Germany (Grunebung Park and immediate vicinity, adjoining grounds of Palmgardens on the west and I. G. Farben Building on the east, banks of Main River within city limits, Ost Park and adjacent city dumps; city parks and gardens 40%, Main River banks 15%, city dumps 12%, brushy fields 9%, orchards 8%, cultivated fields 6%, grass fields 5%, city avenues 5%. — Dec. 21; sunrise to dusk. Overcast and hazy, light drizzling rain beginning in late p.m. brought an early dusk; temp. around 35° F.; wind W, 1-7 m.p.h.; ground covered with 2-4 inches of snow; all water open. Total hours, 5½ (on foot); total miles, 10 (on foot). Nomenclature follows *Guide to the Birds of Europe and North Africa*, London, 1923 (names in brackets are editor's). Hooded crow, 2; carrion crow, 87; rook, 30; magpie, 2; jay, 5; starling, 217; hawfinch, 4; greenfinch, 3; bullfinch, 12; chaffinch, 50; house sparrow, 206; [European] tree sparrow, 850; yellow hammer, 3; crested lark, 1; skylark, 30; tree [brown] creeper, 1; nuthatch, 6; great tit, 11; blue tit, 8; coal tit, 2; crested tit, 1; marsh tit, 2; long-tailed tit, 6; blackbird, 29; robin, 4; green woodpecker, 2; great spotted woodpecker, 3; [European] sparrow-hawk, 2; black-headed gull, 156; pheasant, 3. **Total,** 30 species; about 1738 individuals. (Seen in area Dec. 20: white wagtail, 1; short-toed eagle, 1; rock dove, 1.) The Germans have no doubt killed a great many rock doves for food. The decrease in the number of doves is very noticeable in large cities such as Frankfurt. — Pfc. Jerome J. Carroll.

2. Oahu, T. H. (Kapalama Heights, Halawa trail, Tantalus trail, Woodlawn-St. Louis trail, Kuapa Pond, Kaelepulu Pond, Mokapu Peninsula-Ulupau Head; ponds and marshes 27%, open country 21%, lower forest 29%, upper forest 21%, residential area 2%). — Dec. 21; 6:45 a.m. to 3:30 p.m. Overcast, frequent rains; temp. 66° to 84° F.; wind NNE, 1-30 m.p.h. Fourteen observers in 6 parties. Total hours, 25¾ (on foot); total miles, 178 (21 on foot, 157 in car). Red-footed booby, 799; brown booby, 1; frigate bird, 19; black-

crowned night heron, 75; pintail, 64; duck (sp.), 1000; [Florida] gallinule, 1; [Am.] coot, 158; golden plover, 170; ruddy turnstone, 118; wandering tattler, 6; sanderling, 2; stilt, 176; Chinese dove, 55; barred dove, 276; sooty tern, 194; noddy tern, 4; Hawaiian tern, 25; Japanese tit, 2; English sparrow, 117; ricebird, 140; cardinal, 55; Brazilian cardinal, 6; house finch, 6; Chinese thrush, 3; Japanese hill robin, 73; mynah, 97; white-eye, 103; short-eared owl, 1; elepaio, 28; apapane, 34; Oahu amakhi, 8. **Total,** 32 species; approximately 3816 individuals. — Harlan Chong, Grenville Hatch, Mark Kerr, Unoyo Kojima, Al La Breque, Donald Mitchell, Blanche A. Pedley, Ruth Porter, Frank Richardson, George Sakurai, Richard Settsu, Doris L. Smith, George Sonoda, David Woodside (members and guests, Hawaii Audubon Society).

3. Cienfuegos, Cuba (Atkins Garden and Research Laboratory, Soledad). Dec. 25; 7:30 a.m. to 11:30 a.m. Cloudy, showers; temp. 68° at start 76° at end. Total miles, 4 (on foot). — Least grebe, 20 (6 adults, 14 young, 1 nest 4 eggs); pied-billed grebe, 4; Am. egret, 12; little blue heron, 6; green heron, 1; turkey vulture, 9; sparrow hawk, 5; bobwhite, 13; purple gallinule, 2; limpkin, 8; ground dove, 50 (est.); mourning dove, 200 (est.); smooth-billed ani, 35; hummingbirds (sp.), 4; Cuban lizard cuckoo, 5; belted kingfisher, 2; yellow-bellied sapsucker, 2; West Indian red-bellied woodpecker, 3; eastern kingbird, 6; Greater Antillean pewee, 1; mockingbird, 23; catbird, 3; western red-legged thrush, 1; blue-gray gnatcatcher, 5; black and white warbler, 2; parula warbler, 12; black-throated blue warbler, 5; prairie warbler, 9; palm warbler, 15; Am. redstart, 5; Cuban or Antillean grackle, 25; Cuban or Greater Antillean oriole, 1; eastern meadowlark, 75; common or yellow-faced grasquit, 7. **Total,** 34 species; 569 individuals. — Alfred O. Gross, F. G. Walsingham.

4. Hudson Heights, Que. (same area as in 1943 count; mixed evergreen and deciduous woods 30%, second-growth and brush 30%, open farm land 10%, golf club and open grasslands 10%, gardens and village 20%). — Dec. 28; 7:30 a.m. to 4:30 p.m. Dull in a.m. with snow, clearing at noon, then fine snow; temp. 22° to 27° F.; wind NW to W, 4-20 m.p.h.; 8-12-in. undrifted snow on ground; some running streams open, all other water frozen. Twenty-five observers in 6 parties. Total hours, 42 (30 on skis, 12 on foot); total miles, 45 (33 on skis, 12 on foot). Ruffed grouse, 7; hairy woodpecker, 2; downy woodpecker, 6; blue jay, 58; Am. crow, 4; black-capped chickadee, 93; white-breasted nuthatch, 10; red-breasted nuthatch, 2; golden-crowned kinglet, 1; starling, 37; English sparrow, 16; common redpoll, 12; Am. goldfinch, 1; slate-colored junco, 14. **Total,** 14 species; 263 individuals. (Seen in area during period: pine grosbeak, 2.) — Mr. and Mrs. W. Brosche, Audrey and Violet Bryan, Amy Clarke, Ed. and Eunice Croll, Mr. and Mrs. D. G. Elliot, Dorothy Gurdon, G. A. Jackson, Mrs. J. J. Legate, A. R. Lepingwell, Mrs. D. L. Macaulay, Dunbar and Violet Mullan, John and Mary Mullan, Cecil Nelson, Geof. and Kate Ommanney, Mrs. R. L. Puxley, George and Drucilla Riley, E. B. Watson.

5. Montreal, Que. (Mount Royal, LaSalle Woods, Verdun, Crawford Park, Cote St. Paul Woods, St. Lambert, Tiffin Woods, South Shore of the St. Lawrence from Caughnawaga to Jacques Cartier Bridge and North Shore from Dorval to Victoria Bridge, Heron Island, Nun's Island, Cartierville and Back River.) — Dec. 21. Light snow most of the day, no sunshine; temp. 10° (min.) to 18° (max.); wind NNE until 1:30 p.m., then WSW, 3-10 m.p.h.; 9½-in. snow in open country. Twenty-six observers in 8 parties. Total hours, 45; total miles, 158 (32 on foot, 9 by boat, 117 by car). Common loon 2; mallard, 9; black duck, 110 (partly est.); Am. golden-eye, 483 (partly est.); Am. merganser, 54 (partly est.); red-breasted merganser, 41; sparrow hawk, 2; ruffed grouse, 1; ring-necked pheasant, 101 (partly est.); great black-backed gull, 11; herring gull, 170 (partly est.); horned owl, 5; snowy owl, 2; short-eared owl, 5; downy woodpecker, 12; Canada jay, 1 (Ryan); Am. crow, 150; black-capped chickadee, 22; brown creeper, 4; robin, 5; cedar waxwing, 70; northern shrike, 2; starling, 460 (partly est.); English sparrow, 788 (partly est.); red-wing, 1; common redpoll, 4; song sparrow, 7; snow bunting, 83. **Total,** 28 species; approximately 2605 individuals. (Seen within a week: myrtle warbler (Chambly), hairy woodpecker, white-breasted nuthatch, duck hawk, slate-colored junco. — M. E. Bower, P. Boultbee, Mrs. P. Boultbee, H. A. Bunker, J. A. Decarie, D. G. Elliot, Mrs. D. G. Elliot, J. D. Fry, Miss M. Furness, B. Gollop, Miss G. E. Hibbard, H. A. C. Jackson, A. Johnson, J. G. M. LeMoine, A. Livingstone, W. M. MacBride, I. McLaren, G. H. Montgomery, Mrs. G. H. Montgomery, G. G. Ommanney, R. Rodgers, J. A. Rolland, D. Ryan, E. Skinner, L. McI. Terrill, Mrs. L. McI. Terrill.

6. Quebec, Que. (same area as in 1946; town suburbs 6%, fields 25%, coniferous forests 12%, deciduous woods 6%, mixed woodlands 40%, shores 11%). Dec. 20; 7:30 a.m. to 4 p.m. Clear until 1 p.m., then partly cloudy; temp. 0° to 12°; wind SW, 4-7 m.p.h; 8-15-in. snow on ground; small rivers completely frozen, moving ice on St. Lawrence River. Five observers, all separate. Total hours, 30 (on foot); total miles, 27 (on foot). Ruffed grouse, 5; ring-necked pheasant, 1; hairy woodpecker, 2; downy woodpecker, 6; blue jay, 3; Am. crow, 9; black-capped chickadee, 57; red-breasted nuthatch, 4; white-breasted nuthatch, 1; robin, 3; starling, 90; English sparrow, 47; evening grosbeak, 13; pine grosbeak, 30; common redpoll, 18; pine siskin, 5; Am. goldfinch, 8; slate-colored junco, 1 (collected Dec. 26); white-winged crossbill, 21; snow bunting,

11. **Total,** 20 species; 335 individuals. (Seen in area Dec. 18: purple finch, 1; Dec. 11: horned owl, 1.) — Mrs. G. Langelier, Louis-A. Lord, Louis Lemieux, François Hamel, Raymond Cayouette (La Société Zoologique de Québec).

7. Blenheim (Kent Co.), Ont. (Fargo, Blenheim, Morpeth, Cedar Springs, Erie Beach, Erieau and Rondeau Provincial Park; farm land 65%, water 20%, woods 12%, marsh 2%, town 1%). — Dec. 26; 8:30 a.m. to 5 p.m. Sky overcast in a.m., partly clear in p.m.; temp. 27° F. at 8:30 a.m., 28° F. at 3:00 p.m.; wind moderate; visibility fair; 4-6 in. of snow on the level, light snow in p.m. Lake Erie open with ice on shore; Rondeau Bay frozen; Erieau Harbour with floating ice in channel; marsh areas frozen. Seventeen observers in 5 parties. Total party-hours, 32; total party-miles, 90 (25 on foot, 65 by car). Pied-billed grebe, 1; great blue heron, 1; canvas-back, 1; greater scaup duck, 3; Am. merganser, 9; goshawk, 1; sharp-shinned hawk, 7; Cooper's hawk, 1; red-tailed hawk, 4; Am. rough-legged hawk, 8; bald eagle, 9; marsh hawk, 7; sparrow hawk, 2; Am. coot, 10; killdeer, 1; herring gull, 67; ring-billed gull, 1; Bonaparte's gull, 1; mourning dove, 28; horned owl, 2; screech owl, 1; yellow-shifted flicker, 2; hairy woodpecker, 4; downy woodpecker, 21; blue jay, 7; Am. crow, 205; black-capped chickadee, 7; white-breasted nuthatch, 2; brown creeper, 4; robin, 1; golden-crowned kinglet, 13; cedar waxwing, 4; starling, 253; English sparrow, 1000 (est.) red-wing, 1; rusty blackbird, 3; cardinal, 20; slate-colored junco, 102; tree sparrow, 350; chipping sparrow, 5 (D.H.Y.); song sparrow, 8. **Total,** 41 species; 2177 individuals. Seen recently: eastern towhee, 3; Lapland longspur, 30. — C. M. Anderson, D. A. Arnott, Robt. Barry, R. Blackburn, Dr. L. J. Bohn, Ken. Davey, Harold English, Hugh Evans, Charles Fox, W. M. Gray, Rev. Hugh Stewart, Dr. G. M. Stirrett, R. Schafer, H. B. Wressell, Dr. Harry Young, Harold and Perry Zavitz (Kent Nature Club and friends).

8. Columbus, Ont. (Oshawa lake shore and 6 miles north; marshland, cedar and hemlock groves, open farmland, and deciduous farm woodlots). — Dec. 26; 9 a.m. to 4:30 p.m. Clear; temp. 30°; 3-in. snow on ground. Total hours, 15; total miles, 16 (on foot). Common loon, 1; grebe (sp.), 1; Am. golden-eye, 18; buffle-head, 200 (est.); Am. merganser, 2; goshawk, 1; sparrow hawk, 2; ruffed grouse, 1; great black-backed gull, 5; herring gull, 11; mourning dove, 16; horned owl (dark phase), 3; barred owl, 2; long-eared owl, 2; saw-whet owl, 1; robin, 1; starling, 1; English sparrow, 55; tree sparrow, 18; snow bunting, 27. **Total,** 20 species; 368 individuals. — Arthur Slyfield, Peter Baluk, David Hambly, Donald Hambly (members of Burroughs Field Naturalists' Club).

9. Hamilton, Ont. (Ancaster, Dundas, Hamilton and harbor, Burlington Beach, Bronte, Aldershot, Waterdown, Lake Medad). — Dec. 21; 8 a.m. to 5 p.m. Overcast; temp. 33° to 40° F., wind N to SW, 15 m.p.h.; 2-in. old snow; marshes frozen, harbor open. Fifty-five observers in 19 parties. Total hours, 109; total miles, 229 (191 on foot, 38 by car). Red-throated loon, 2; Holboell's grebe, 1; gannet, 1 (imm., present Dec. 14 to Jan. 2. — I.H., G.W.N.); great blue heron, 2; black-crowned night heron, 1; black duck, 60; ring-necked duck, 4; canvas-back, 1; greater scaup duck, 220; Am. golden-eye, 185; buffle-head, 3; old-squaw, 29; white-winged scoter, 1; ruddy duck, 1 (H.K., G.W.N., J.H.W.); hooded merganser, 3; Am. merganser, 1500 (est.); red-breasted merganser, 200 (est.); goshawk, 2; sharp-shinned hawk, 1; Cooper's hawk, 3; red-tailed hawk, 19; marsh hawk, 5; sparrow hawk, 5; ruffed grouse, 8; ring-necked pheasant, 10; Florida gallinule, 1 (plus 1 found dead); great black-backed gull, 47; herring gull, 2500 (est.); ring-billed gull, 18; mourning dove, 9; screech owl, 2; horned owl, 9; snowy owl, 1; long-eared owl, 2; belted kingfisher, 3; yellow-shafted flicker, 10; hairy woodpecker, 13; downy woodpecker, 58; horned lark, 1; blue jay, 66; Am. crow, 5; black-capped chickadee, 234; white-breasted nuthatch, 22; red-breasted nuthatch, 1; brown creeper, 22; winter wren, 9; long-billed marsh wren, 1 (N.B.); robin, 8; hermit thrush, 2 (G.W.N., L.S.); golden-crowned kinglet, 38; cedar waxwing, 278; starling, 2504 (est.); English sparrow, 938 (est.); red-wing, 1; rusty blackbird, 1; cardinal, 54; purple finch, 9; common redpoll, 33; Am. goldfinch, 9; white-winged crossbill, 13 (2 flocks, K.C., J.D.); slate-colored junco, 875; tree sparrow, 518; white-throated sparrow, 1; swamp sparrow, 5; song sparrow, 54; snow bunting, 26. **Total,** 67 species; about 10,670 individuals. (Seen since count: Am. scoter, 1; red-shouldered hawk, 1; barred owl, 1; tufted titmouse, 1; catbird, 1; ruby-crowned kinglet, 1; Bohemian waxwing, 1; northern shrike, 2; meadow-lark (sp.), 1; vesper sparrow, 3; Oregon junco, 1.) — Edith Austen, Dean Axelson, Eric Bastin, Don, Neil, and Mr. and Mrs. R. D. F. Bourne, Wm. Campbell, Reginald Clark, N. C. Clarke, K. J. Cox, John A. Crosby, Bill Cudmore, Jim Dowell, Mrs. W. B. Duncan, Esther Elstone, Lena Elstone, R. O. Elstone, J. A. Farmer, Mrs. J. G. Farmer, Bob Finlayson, Ian Halladay, Donald Harvey, George Holland, Paul Holmes, H. E. Kettle, Margaret Lamb, Jack Large, Peter Large, George Lennie, Eleanor Malcolm, J. A. Mannheimer, R. P. Markle, Jack Martin, Neil Matthews, John Moule, Gertrude Nelson, George W. North, Mrs. N. M. Robertson, Bob Sergeant, James Shaw, Doris H. Speirs, J. M. Speirs, Grace Stewart, Laura Stewart, Gordon Sweatman, George Uptegrove, Wm. Waldhof, Isabel, Jimmie, and Mabel Watson, Mrs. M. R. Watters, J. H. Williams, Laurel E. Williams, James Wood (members and friends of Hamilton Nature Club).

10. Lindsay, Ont. (close to Scugog River, above and below town; swamps, fields, lumber yards,

river bank and streets in town). — Dec. 26; 7:30 to 11:48 a.m., 12:40 to 4:25 p.m. Dull except at noon when sun faintly visible; temp. 11° to 18° to 16°; wind NE to SE; about 15-in. snow; some hoar frost on trees. Total miles, 18 (on foot). Ruffed grouse, (numerous tracks); hairy woodpecker, 1; downy woodpecker, 1; blue jay, 1; black-capped chickadee, 2; golden-crowned kinglet, 4; starling, 45 (est.); English sparrow, 130 (est.). **Total,** 8 species; approximately 185 individuals. (Observed during week: robin, eastern meadowlark, purple finch, Am. goldfinch, crossbill (sp.); snow bunting.) — E. W. Calvert.

11. London, Ont. (valley of the Thames River from London to Deleware; Redman's swamp; Trott's swamp; Coves; Tin Springs and "Eagle" woods; also 2 feeding stations in the same area; pasture 5%, deciduous woodland 20%, swamp 20%, mixed wooded river bank 55%). — Dec. 27; 8 a.m. to 4:30 p.m. Overcast, partially clearing late in day; temp. 24° at 8 a.m.; wind SW to W, 5-15 m.p.h.; visibility poor; 6-in. snow on the level; river mostly open; other streams mostly frozen. Thirty-eight observers in 12 parties. Total party-hours, 50; total party-miles, 90 (30 on foot, 60 by car). Great blue heron, 1; black duck, 7; Am. golden-eye, 174; Am. merganser, 75; Cooper's hawk, 2; sharp-shinned hawk, 2; goshawk, 1; red-tailed hawk, 9; Am. rough-legged hawk, 4; bald eagle, 4; sparrow hawk, 1; ring-necked pheasant, 2; herring gull, 9; mourning dove, 6; horned owl, 3; belted kingfisher, 2; yellow-shafted flicker, 1; pileated woodpecker, 2; hairy woodpecker, 1; downy woodpecker, 21; blue jay, 52; Am. crow, 55 (est.); black-capped chickadee, 118; brown-capped chickadee, 1 (observed in a flock of black-capped chickadees); white-breasted nuthatch, 51; red-breasted nuthatch, 2; brown creeper, 24; winter wren, 5; brown thrasher, 1 (comes regularly to a feeding station); robin, 1; golden-crowned kinglet, 62; starling, 285 (est.); English sparrow, 275 (est.); red-wing, 2; cardinal, 111; common redpoll, 4; Am. goldfinch, 13; slate-colored junco, 170 (est.); tree sparrow, 70; song sparrow, 28 (quite common this winter in suitable habitats). **Total,** 40 species, approximately 1657 individuals. (Observed in area recently: Dec. 14, snow bunting; Dec. 17, myrtle warbler; Dec. 25, short-eared owl, screech owl; Dec. 26, eastern meadowlark.) — Mary Abbott, A. Clendenning, Barry Camp, R. G. Cummings, Mrs. Cummings, John and Tommy Cummings, Irene Chapman, Eli Davis, Kay Fetherston, Margaret Ferrier, Frank Girling, W. G. Girling, Ted Garside, J. C. Higgins, Don. Higgins, Mary Harvey, John Harvey, George Harvey, Mr. Harvey, Mrs. Harvey, Ron. Hambly, Howard Keast, Alan Loughrey, James Leach, C. Maddeford, Wm. Morris, M. J. Markham, Miss Marwood, Sidney Pratt, Millar Stewart, Mrs. Stewart, Margaret Stevens, J. Skelton, M. Skelton, Helen and Ada Shipley, Charles Whitelaw (McIlwraith Ornithological Club).

12. Ottawa, Ont. (radially about city). — Dec. 21; dawn to dusk. Clear; temp. 5° to 20° F.; no wind; 8-in. snow on ground; open water at rapids. Twenty-eight observers in 12 parties. Total party hours, 57; total miles, 165. Am. golden-eye, 147; Am. merganser, 33; sharp-shinned hawk, 1; sparrow hawk, 1; ruffed grouse, 16; ring-necked pheasant, 20; glaucous gull, 1; herring gull, 1; screech owl, 1; horned owl, 1; pileated woodpecker, 1; hairy woodpecker, 6; downy woodpecker, 8; blue-jay, 3; Am. crow, 27; black-capped chickadee, 59; white-breasted nuthatch, 18; brown creeper, 3; robin, 2; cedar waxwing, 40; northern shrike, 2; starling, 301; English sparrow, 1565; bronzed grackle, 1; common redpoll, 80; pine siskin, 95; Am. goldfinch, 37; slate-colored junco, 2; tree sparrow, 2; song sparrow, 3. **Total,** 30 species; 2477 individuals. — H. Lloyd, E. Lloyd, A. Breitung, R. Frith, Mr. and Mrs. C. H. Bennett, C. Nieghorn, G. Cooch, D. Savile, Mr. and Mrs. J. W. Groves, O. Hewitt, M. Spencer, G. Hammond, E. Godfrey, K. Bowles, C. Frankton, M. Patterson, Mr. and Mrs. V. Solman, Mr. and Mrs. F. Banfield, D. Fisher, M. Mason, A. Bourguignon, M. Stuart, V. Ross, L. McKinnon (Ottawa Field-Naturalists' Club).

13. Rutherglen, Ont. (15 miles east of North Bay to 10 miles west of Mattawa; black spruce bog, township of Bonfield, highway to settlement of CPR Station at Rutherglen, area around Pimisi Bay, Mattawa River, Kennedy Lake, settlement of CPR Station at Eau Claire, Smith's Lake and Amable du Fond River; open farmland 20%, coniferous woodlots and black spruce bog 10%, second growth forest land of mixed coniferous and deciduous trees 60%, lakes and rivers 10%). Dec. 23. Cloudy to clear; temp. 6° to 21°; wind NE, SE, NW, 2-10 m.p.h.; 17-in. soft snow on ground; all fresh water except rapids frozen. Total hours, 9; total miles, 35 (by car and on foot). Hairy woodpecker 1, blue jay 2, black-capped chickadee 20, brown-capped chickadee 2, red-breasted nuthatch 10, brown creeper 2, evening grosbeak 9, purple finch 18, pine siskin 81, Am. goldfinch 17, red crossbill 2, white-winged crossbill 17, snow bunting 10. **Total,** 13 species; approximately 191 individuals. — Louise de Kiriline Lawrence.

14. Toronto, Ont. (woods, fields, beaches near city; 30% wooded bottomland, 30% open upland, 40% waterfront). — Dec. 28; 9:30 a.m. to 12:30 p.m., 1:30 to 4:30 p.m. Clear; temp. 15°; wind NW, strong; light covering of snow on ground. Seven observers in 2 parties in a.m., together in p.m. Total miles, 30 (25 by car, 5 on foot). Mallard-black duck hybrid flock, 250; greater scaup duck, 300; Am. golden-eye, 40; buffle-head, 27; old-squaw, 200; Am. merganser, 3; red-tailed hawk, 3; sparrow hawk, 1; ring-necked pheasant, 3; great black-backed gull, 2; herring gull, 125; ring-billed gull, 1; horned owl, 1; short-eared owl, 1; downy woodpecker, 6; blue jay, 23; Am. crow, 1; black-capped

chickadee, 14; white-breasted nuthatch, 2; brown creeper, 1; golden-crowned kinglet, 2; cedar waxwing, 3; starling, 75; English sparrow, 90; cardinal, 6; slate-colored junco, 30; tree sparrow, 1; fox sparrow, 2 (J.M.S.). **Total,** 28 species; approximately 1213 individuals. — Dr. John MacArthur, J W. MacArthur, Jr., Robert MacArthur, D. L. MacDonald, Doris Speirs, J. Murray Speirs, J. R. Miller.

15. West Elgin (Aldboro and Dunwich Twps.), Ont. (area within 7½-mile radius of West Lorne; pasture land 20%, deciduous woodlots 18%, pine woods 2%, lake shore 10%, river sidehills 50%). — Dec. 26; 7:30 a.m. to 5 p.m. Overcast, snowing lightly during a.m.; temp. 26° at start, 28° at return; wind NW, 5 m.p.h.; 5-in. snow on ground; river frozen except rapids, Lake Erie clear of ice. Fifteen observers in 4 parties. Total hours, 21 (20 on foot, 1 by car); total miles, 41 (27 on foot, 14 by car). Am. golden-eye, 14; Am. merganser, 1; red-tailed hawk, 10; Am. rough-legged hawk, 2; marsh hawk, 1; bob-white, 7; ring-necked pheasant, 3; ruffed grouse, 1; mourning dove, 56; screech owl, 1; horned owl, 1; long-eared owl, 1; downy woodpecker, 23; hairy woodpecker, 6; horned lark, 2; blue jay, 21; Am. crow, 7; black-capped chickadee, 66; white-breasted nuthatch, 9; brown creeper, 2; golden-crowned kinglet, 3; starling, 109; English sparrow, 92; eastern meadowlark, 2; cardinal, 52; slate-colored junco, 161; tree sparrow, 218; song sparrow, 5. **Total,** 28 species; 876 individuals. — C. C. Brown, Nora Dane, F. C. Dicker, E. R. Lancaster, H. L. Lancaster, G. Lemon, V. E. Lemon, R. E. Lemon, J. Merrett, W. Sheeler, R. Walker, D. K. Wilson, E. Wilson, B. Vogan, G. Vogan (West Elgin Nature Club).

16. Winnipeg, Manitoba — Dec. 28; temp. 0° to 11°; snow 13-in. deep; wind SE, 10 m.p.h. Thirteen observers in 8 parties, also 7 observers at feeding stations. Am. golden-eye, 1; Am. merganser, 4; red-breasted merganser, 1; prairie (?), falcon, 1; ruffed grouse, 3; sharp-tailed grouse, 11; European partridge, 62; ring-necked pheasant, 1; screech owl, 1; horned owl, 2; saw-whet owl, 1; pileated woodpecker, 1; hairy woodpecker, 4; downy woodpecker, 12; blue jay, 23; black-capped chickadee, 43; white-breasted nuthatch, 23; red-breasted nuthatch, 1; brown creeper, 2; robin, 1; Bohemian waxwing, 35; northern shrike, 1; starling, 400 (est.); evening grosbeak, 2; pine grosbeak, 94; common redpoll, 14; snow bunting, 350 (est.); **Total,** 27 species; 1094 individuals. — H. Copland, Mrs. A. Downes, W. Downes, R. Fryer, O. Gibson, H. Hosford, W. Johnston, V. B. Latta, A. G. Lawrence, H. Mossop, A. H. Shortt, G. Smith, R. W. Sutton, G. Childs, Mrs. A. Haak, Mrs. A. G. Isaac, Mrs. J. S. Jones, Mrs. H. Macdonald, Mrs. E. J. McMillan, Mrs. H. D. Whellams, (Natural History Society of Manitoba).

17. Yorkton, Sask. (area 15 miles in diameter with Yorkton as center). — Dec. 26; 9 a.m. to 5 p.m. Clear, bright day; temp. 20° at start, 34° at 1 p.m.; calm in a.m., but NW wind, 15 m.p.h., by later p.m.; loose snow, 20-24 in. deep. Nine observers in 5 parties. Total party-hours, 12 (5 by car, 7 on foot); total party-miles, 38½ (34 by car, 4½ on foot). Ruffed grouse, 3; sharp-tailed grouse, 76; European partridge, 14; downy woodpecker, 3; Canada jay, 1; blue jay, 7; Am. magpie, 4; black-capped chickadee, 4; Bohemian waxwing, 58 (est.); English sparrow, 217; snow bunting, 4. **Total,** 11 species, approximately 391 individuals. — Jim Allen, Brother Clarence, Jim Davis, Fred Dicker, C. J. Houston, C. Stuart Houston, Fred Langstaff, Mrs. J. Meekma, Nathaniel Olson (Yorkton Natural History Society).

18. Auburn, Me. (area south of Auburn; mixed hardwood 40%, mixed conifers 20%, swamp 10%, fields 10%, pasture 10%, cutover woodland 5%, river 5%, and feeding station). — Dec. 28. Partly cloudy; temp. 20° to 30°; wind W, 8-10 m.p.h.; 8-9-in. snow. Total hours, 8; total miles, 5½ (on skis). Ruffed grouse, 1; herring gull, 73; hairy woodpecker, 1; downy woodpecker, 3; blue jay, 4; Am. crow, 13; black-capped chickadee, 76; white-breasted nuthatch, 1; brown creeper, 1; robin, 2 (clearly observed at feeding station at 15 feet); starling, 10; English sparrow, 10; pine siskin, 16; Am. goldfinch, 9; slate-colored junco, 84; tree sparrow, 56; song sparrow, 8. **Total,** 17 species; 368 individuals. (Seen within week: ring-necked pheasant, 2; red-breasted nuthatch, 2; purple finch, 1; snow bunting, 13.) — Douglass Morse, Minot Morse, Jr.

19. Brunswick, Me. (Bailey's Island, Orr's Island, Cundy's Harbor, Mere Point). — Dec. 21; 7:00 a.m. to 4:00 p.m. Clear with increasing cloudiness in p.m.; wind NW, 5-10 m.p.h., temp. 20°; very little snow; water (salt) mostly open. Observers together. Total miles, 44 (35 by car, 9 by foot). Common loon, 1; European cormorant, 25; golden-eye, 317; old-squaw, 31; Am. scoter, 2; red-breasted merganser, 18; bald eagle, 2; ruffed grouse, 3; herring gull, 500; black guillemot, 1; blue jay, 2; Am. crow, 21; black-capped chickadee, 10; brown thrasher, 1 (flushed from brambles at water's edge, surrounded and closely studied); golden-crowned kinglet, 41; starling, 26; myrtle warbler, 2; English sparrow, 13; purple finch, 6; white-winged crossbill, 5; slate-colored junco, 5; tree sparrow, 3 **Total,** 22 species; 1035 individuals. — Edward F. Dana, Nathan Dane II, F. Burton Whitman, Jr.

20. Laconia, N. H. (Silver Lake, Tilton, to west shore of Lake Winnipesaukee, centering around Lake Winnisquam; lake shores, suburban areas, open fields and borders, hardwoods, white pine, hemlock, and mixed woods.) — Dec. 22; 8:30 a.m. to 4:30 p.m. Fair; temp. 20° to 24°; wind NW, 15 m.p.h.; a few inches of snow on ground, Silver

Lake mostly frozen, others mostly open. Total hours, 8 (4 on foot, 4 in car); total miles, 4 (on foot). Mallard, 1. black duck, 1; Am. golden-eye, 155; Barrow's golden-eye, 1 ♂ (presumably same as one seen last winter at same place; head-stripe, short bill, and darker wing clearly distinguished); bufflehead, 1 ♀; hooded merganser, 6 (1 ad. ♂); Am. merganser, 80; bald eagle, 1 (ad.); ruffed grouse, 2; herring gull, 41; Am. crow, 18; black-capped chickadee, 28; brown creeper, 3; starling, 2; English sparrow, 6; Am. goldfinch, 68; pine siskin, 2; slate-colored junco, 70; tree sparrow, 3. **Total,** 19 species; about 489 individuals. — Tudor Richards.

Another count of the same area on the same day by Ernestine McCrillis and Muriel Kendrick also totalled 19 species (381 individuals), missing the 4 single ducks, the eagle, the grouse and the siskins, but adding hairy woodpecker, 1; downy woodpecker, 1; blue jay, 2; white-breasted nuthatch, 2; golden-crowned kinglet, 2; common redpoll, 12; and red crossbill (a pair studied at 4 ft. range).

21. Waterville Valley, White Mts., N.H. from the inn, alt. 1500 ft., to beyond Flume Brook Logging Camp, alt. 2500 ft.+, on foot, returning by car; then to Tripoli Rd. and around via main road to inn on foot; spruce-fir 60%, northern hardwoods 20%, mixed woods 20%) — Dec. 23; 9 a.m. to 4 p.m. Light snowstorm; temp. about 20°; wind NW, 10 m.p.h.; 1-2 feet of snow. Total hours, 6¾ on foot, ¼ by car. [Total miles ? — Ed.] Ruffed grouse, 6; hairy woodpecker, 4; downy woodpecker, 4; blue jay, 1; black-capped chickadee, 20; brown-capped chickadee, 1; white-breasted nuthatch, 1; red-breasted nuthatch, 5; brown creeper, 2; golden-crowned kinglet, 9; purple finch, 10; pine siskin, 10; red crossbill, 11; white-winged crossbill, 7. **Total,** 14 species, about 91 individuals. — Tudor Richards.

22. Bennington, Vt. (Everett orchards, lower eastern slope of Mt. Anthony, 4 feeding stations in the outskirts of Bennington village; open fields 20%, open orchards 20%, woods 40%, feeding-stations 20%). — Dec. 21. Low clouds, snowing from 9:30 to 11:00 a.m. to a depth of 1 inch on previously bare ground; calm; temp. 23° to 29°. Eleven observers, 5 at home feeders, 6 in ones or twos on foot most of day. Total miles, 12½. Sparrow hawk, 1; ruffed grouse, 1; ring-necked pheasant, 1; saw-whet owl, 1 (picked up in road, too hurt to fly; still alive); hairy woodpecker, 2; downy woodpecker, 11; blue jay, 14; Am. crow, 11; black-capped chickadee, 26; white-breasted nuthatch, 7; starling, 68; English sparrow, 250; purple finch, 2; slate-colored junco, 4; tree sparrow, 40. **Total,** 15 species, 439 individuals. (A horned owl was shot on Dec. 19.) — Dr. and Mrs. Lucretius H. Ross, Mr. and Mrs. Ralph R. Smith, Tom Foster, Howard Nash, Mrs. Margery Ludlow, Mrs. Stella Higgins, Dorothy and Hettie Barrow, Erna Cunradt.

23. Middlebury, Vt. (corner Washington and Seminary Sts. east along road ½ mile, north across country ½ mile, east 2 miles to near Muddy Brook, south across road 1 mile, west 2 miles, north ½ mile to road, and back to point of beginning; village suburbs 1%, open farmland 40%, mixed hardwoods-conifer second-growth 59%). — Dec. 20; 8:45 a.m. to 3:45 p.m. Clear; temp. 8° to 20°; wind NW, 1-7 m.p.h.; 1-in. snow, all brooks frozen. Total hours, 7; total miles, 7 (on foot). Ruffed grouse, 3; hairy woodpecker, 2; downy woodpecker, 2; blue jay, 1; black-capped chickadee, 22; white-breasted nuthatch, 2; starling, 3; English sparrow, 5; purple finch, 4; white-winged crossbill, 19 (observed with binoculars at close range while feeding from hemlock cones); tree sparrow, 5. **Total,** 11 species; 68 individuals. — A. M. Decker.

24. Wells River, Vt. (north, west and south of town, including portions of the Connecticut and Wells River valleys with altitudes ranging from 400 to 1200 feet; mixed woodland 50%, open farmland 40%, town streets 10%). — Dec. 28; 9:00 a.m. to 4:30 p.m. Clear; temp. 3° to 10°; wind NW, 8-12 m.p.h.; ground covered with 7 to 12 in. of snow; most rapid parts of Connecticut River open, Wells River largely frozen. Total hours, 7½; total miles, 10 (on foot). Am. golden-eye, 36; Am. merganser, 8; ruffed grouse, 6; horned owl, 1; pileated woodpecker, 1; hairy woodpecker, 1; blue jay, 2; Am. crow, 1; black-capped chickadee, 59 (9 flocks); red-breasted nuthatch, 1; brown creeper, 4; golden-crowned kinglet, 7 (2 flocks); pine grosbeak, 2; pine siskin, 37 (3 flocks); white-winged crossbill, 5; slate-colored junco, 10; tree sparrow, 8. **Total,** 17 species; 189 individuals. (Six common redpolls were seen on the 26th). — Wendell P. Smith.

25. At sea off Monomoy Point, Mass. (from Nantucket Sound around the Point to Stone Horse Shoal, Great Round Shoal 8 miles southeast, and Handkerchief Shoal 5 miles south in Atlantic Ocean). — Dec. 20; 8 a.m. to 3 p.m. Clear; temp. 18° to 26°; wind NW, moderate, diminishing in p.m.; ocean rough at first. Boat cruised around, about 40 miles; maximum diameter 11 miles from NW to SE. Common loon, 1; red-throated loon, 10; horned grebe, 1; gannet, 20; Canada goose, 120; black duck, 100; old-squaw, 3900; Am. eider, at least 300,000 (the lowest of 4 independent estimates, the highest being 540,000; the biggest flock, on the extreme southwest edge of Great Round Shoal, was about 7 miles long and ¼ mile deep in its middle third); white-winged scoter, 4000; surf scoter, 300; Am. scoter, 400; sanderling, 2; great black-backed gull, 32; herring gull, 300; Bonaparte's gull, 5; kittiwake, 3; razor-billed auk, 13; Brünnich's murre, 1 (7 other large alcids, probably auks, seen also); Am. crow, 1. **Total,** 19 species; at least 309,209 individuals. (The 3 flocks of eiders all out of sight from land. Other Massachusetts coastal counts also

reflect the invasion of razor-billed auks, the best since February, 1884). — Richard Bowen, Harold Claflin, T. L. Eliot, Jr., Ludlow Griscom, Henry M. Parker.

26. Belmont and Fresh Pond (Cambridge), Mass. (entire Town of Belmont plus adjacent Fresh Pond and Fresh Pond marshes; same as 13 previous years; greatest diameter 4 miles; deciduous woodland 35%, open meadow 10%, ponds 5%, evergreen woodland 20%, residential 30%). — Dec. 27; 7:40 a.m. to 4:35 p.m. Continuous light snow until 3:50 p.m.; temp. 22° to 30° to 25° F.; wind NE, 10-20 m.p.h.; 22-in. snow on ground; ponds completely frozen over for second time in 14 years. Eight observers in pairs, others alone; many in field for only 1 to 4 hours. Total hours, 29½; total miles, 30 (on snowshoes and skis). Am. merganser, 1 (flying over Fresh Pond); sharp-shinned hawk, 1; red-shouldered hawk, 1; sparrow hawk, 4; ring-necked pheasant, 22; herring gull, 245; yellow-shafted flicker, 7; hairy woodpecker, 1; downy woodpecker, 18; blue jay, 48; Am. crow, 20; black-capped chickadee, 73; white-breasted nuthatch, 8; brown creeper, 3; robin, 5; hermit thrush, 1 (at feeding station); golden-crowned kinglet, 2; cedar waxwing, 41; starling, 198; English sparrow, 231; Am. goldfinch, 37; Savannah sparrow, 1 (first local winter record; observed through 7 x 35 binoculars at 20 ft. and characteristic call note heard — C.S.R., E.G.C.); slate-colored junco, 78; tree sparrow, 165 (second highest); white-throated sparrow, 13 (second highest); fox sparrow, 4 (tied highest); swamp sparrow, 1; song sparrow, 14. **Total,** 28 species; 1243 individuals. — Elisha Atkins, Eleanor G. Cooley, Mrs. Francis Davis, Mrs. G. A. Drew, George Drew, Mr. and Mrs. Hervey Elkins, Kimball C. Elkins, George Ferguson, Mr. and Mrs. Richard Foster, Clinton A. Reynolds, Chandler S. Robbins, Mr. and Mrs. Samuel D. Robbins, Robert Smolker (Belmont Bird Club).

27. Cape Ann, Mass. (Beverly, Essex, Manchester, Gloucester, Rockport, Ipswich Beach). — Dec. 28; dawn to sunset. Overcast to clear; temp. 20° to 30°; wind NW, 10-30 m.p.h.; 6-12 in. of snow on ground; ponds and marshes largely frozen. Twenty-five observers in 8 parties. Total party-hours, 68; total party-miles, 270 (245 by car, 25 on foot). Common loon, 12; red-throated loon, 12; Holboell's grebe, 16; horned grebe, 67; European cormorant, 211; Canada goose, 6; mallard, 1; black duck, 70; pintail, 1; greater scaup duck, 2; Am. golden-eye, 472; buffle-head, 20; old-squaw, 68; Am. eider, 1; white-winged scoter, 147; surf scoter, 14; Am. scoter, 7; red-breasted merganser, 209; goshawk, 1; sharp-shinned hawk, 1; red-tailed hawk, 1; red-shouldered hawk, 2; Am. rough-legged hawk, 1; sparrow hawk, 1; ring-necked pheasant, 5; purple sandpiper, 80; glaucous gull, 5; Iceland gull, 6 (Iceland, 4; Kumlien's, 2); great black-backed gull, 163; herring gull, 2600; ring-billed gull, 3; Bonaparte's gull, 2; kittiwake, 5; razor-billed auk, 6; Brünnich's murre, 2; dovekie, 1; black guillemot, 3; mourning dove, 7; screech owl, 1; yellow-shafted flicker, 11; hairy woodpecker, 2; downy woodpecker, 16; horned lark, 15; blue jay, 107; Am. crow, 337; black-capped chickadee, 152; white-breasted nuthatch, 8; brown creeper, 8; catbird, 1 (W. B.); robin, 26; hermit thrush, 1; golden-crowned kinglet, 26; ruby-crowned kinglet, 3 (R.L.); starling, 3300; myrtle warbler, 160; English sparrow, 155; purple finch, 10; Am. goldfinch, 17; Ipswich sparrow, 1; Savannah sparrow, 2; slate-colored junco, 370; Oregon junco (ssp.), 1 (♂ in fine plumage at feeding station — Burnett); tree sparrow, 101; white-throated sparrow, 14; fox sparrow, 12; song sparrow, 33; snow bunting, 24. **Total,** 67 species (1 additional subspecies); 9145 individuals. (Two Carolina wrens and a yellow-breasted chat had been wintering in Gloucester until the heavy snow just preceding the census. A killdeer in southeastern Gloucester missed on census day, was seen 2 days later by Elisha Atkins.) — Clarence E. Allen, Wallace Bailey, Edgar M. Batchelder, Frances Burnett, Fred Burrell, Sally Bowker, Dorothy W. Caldwell, Charles M. Crain, Charles Crompton, Davis H. Crompton, Martin S. Curtler, Theodore L. Eliot, Jr., Robert W. Green, Winthrop Harrington, Lee L. Jameson, Martin Karplus, Ralph Lawson, Bertram Leadbeater, George G. Loring, C. Russell Mason, Sally Means, Wesley T. Perkins, Mrs. Lincoln S. Simonds, Dorothy E. Snyder, Mrs. Heyliger deWindt.

28. Cape Cod, Mass. (parts of Chatham, Brewster, Orleans, and Eastham). — Dec. 21; dawn to dark. Clear; light NW wind; temp. 20° to 30°; ground bare; ponds froze over the previous night. Four parties over 4 routes of many years. Total party-hours, 40; total party-miles, 224 (205 by car, 19 on foot). Common loon, 18; red-throated loon, 5; Holboell's grebe, 1; gannet, 6; great blue heron, 19; Am. bittern, 1 (third winter record); Canada goose, 3980 (remarkable count); brant, 275 (best since 1931); mallard, 11; black duck, 3010; baldpate, 2; green-winged teal, 12; redhead, 15; greater scaup duck, 200; lesser scaup duck, 43; Am. golden-eye, 885; buffle-head, 138; old-squaw, 700; Am. eider, 350; king eider, 1 (fully adult male); white-winged scoter, 97; surf scoter, 9; ruddy duck, 19; hooded merganser, 14; Am. merganser, 200; red-breasted merganser, 110; Cooper's hawk, 1; red-tailed hawk, 4; bald eagle, 9; marsh hawk, 3; sparrow hawk, 2; ruffed grouse, 1; ring-necked pheasant, 1; king rail, 1 (there are several early-winter records); Am. coot, 10; Wilson's snipe, 2; red-backed sandpiper, 156; sanderling, 23; Iceland gull, 1; great black-backed gull, 775; herring gull, 7800; ring-billed gull, 57; Bonaparte's gull, 3; razor-billed auk, 1; dovekie, 1; horned owl, 1; long-eared owl, 2; saw-whet owl, 1; belted kingfisher, 3; yellow-shafted flicker, 52; downy woodpecker, 8;

horned lark, 38; blue jay, 30; Am. crow, 162; black-capped chickadee, 310; catbird, 1; robin, 16; eastern bluebird, 68; golden-crowned kinglet, 18; cedar waxwing, 22; starling, 610; myrtle warbler, 960; palm warbler, 1 (western); English sparrow, 115; eastern meadowlark, 1; Am. goldfinch, 170; Ipswich sparrow, 1; Savannah sparrow, 15; slate-colored junco, 40; tree sparrow, 89; field sparrow, 4; white-throated sparrow, 14; swamp sparrow, 12; song sparrow, 40; snow bunting, 10. **Total,** 75 species, 21,786 individuals. (Seen in area on Dec. 20: bob-white, laughing gull, mourning dove.) — Virginia Armstrong, Richard Bowen, William H. Drury, Jr., T. L. Eliot, Jr., Ludlow Griscom, Stuart K. Harris, Rosario Mazzeo, James Moran, Henry M. Parker, Dorothy E. Snyder.

29. Cohasset and North Scituate, Mass. (fields, woodland and seacoast). — Dec. 25; 9 a.m. to sunset. Fair; temp. 18° at start, 30° at return; practically calm; 3-in. snow on ground. Total miles, 9 (8 on foot; 1 in car). Observers together. European cormorant, 12; black duck, 102; Am. golden-eye, 32; white-winged scoter, 1; surf scoter, 2; red-breasted merganser, 12; great black-backed gull, 3; herring gull, 315; belted kingfisher, 1; yellow-shafted flicker, 1; downy woodpecker, 4; blue jay, 5; Am. crow, 14; chickadee, 41; robin, 17; cedar waxwing, 3; starling, 156; myrtle warbler, 5; English sparrow, 4; slate-colored junco, 19; tree sparrow, 34; fox sparrow, 1. **Total,** 22 species, 784 individuals. (Carolina wren on Dec. 26). — Laurence B. Fletcher, Winsor M. Tyler.

30. Great Barrington, Mass. (central and west side of town, south through Sheffield to Ashley Falls and west to include Egremont; residential area 10%, hemlock and pine woods 10%, hedges and open country 80%). — Dec. 28; 8:00 a.m. to 3:30 p.m. Overcast with occasional snow flurries; temp. 25° to 29°; wind NW, 15-25 m.p.h.; observation difficult in open country; ground covered with 18-in. snow from recent storm; river open only where current was swift. Eleven observers, 9 at feeding stations and about homes, and 1 party of 2 covering area in car. Total party-hours, 7½ (3 on foot); total party-miles on foot, 4. Ruffed grouse, 2; horned owl, 1 (heard); hairy woodpecker, 1; downy woodpecker, 14; blue jay, 5; Am. crow, 64; black-capped chickadee, 84; white-breasted nuthatch, 27; brown creeper 1; golden-crowned kinglet, 5; starling, 75; English sparrow, 43; slate-colored junco, 85; tree sparrow, 48; white-throated sparrow, 2; **Total,** 15 species; 457 individuals. — Miss Jessie Buck, Mrs. A. P. Culver, Mrs. Ruth I. Derby, John M. Francis, Mrs. M. B. Heady, Mrs. John B. Hull, Jr., Mrs. R. J. Longdyke, Mr. and Mrs. William B. Nisbet, Jr., Eugene H. Varney, Mrs. Donald Worthington (Hoffmann Bird Club).

31. Holyoke, Mass. (same area as in past counts: Mt. Tom to the Connecticut line, with the addition of Westover Field; riverside lowlands 40%, Conn. River 20%, Forest Park, Springfield, 10%, town suburbs 10%, woodland 10%, open country 10%). — Dec. 21; dawn to dusk. Overcast till 9 a.m., then clear; temp. 23° to 33° F.; wind NW, 1-24 m.p.h.; ground bare; all ponds frozen, but certain streams and Conn. River open in places. Eight observers in 4 parties, and 1 at home. Total hours, 25 (23 on foot, 2 by car); total miles, 14 (on foot). Black duck, 65; green-winged teal, 1; old-squaw, 1; Am. merganser, 52; ruffed grouse, 2; ring-necked pheasant, 3; herring gull, 25; ring-billed gull, 50 (A.M.B., J.H.C., R.D.R.); pileated woodpecker, 2; hairy woodpecker, 3; downy woodpecker, 7; horned (northern) lark, 14; blue jay, 22; Am. crow, 1000 (est.); black-capped chickadee, 67; white-breasted nuthatch, 2; brown creeper, 1; winter wren, 2; catbird, 1 (at a Holyoke feeder since mid-December); robin, 1; golden-crowned kinglet, 14; northern shrike, 1; starling, 2000 (est.); English sparrow, 90; goldfinch, 115; slate-colored junco, 74; tree sparrow, 75; song sparrow, 7. **Total,** 28 species; approximately 3696 individuals. (A reported wood duck and ruddy duck were missed. Otherwise, the figures for the waterfowl, gulls, crows and starlings probably account for all the individuals there were in the area. The 50 ring-billed gulls constitute phenomenal numbers (see Bagg and Eliot: "Birds of the Conn. Valley in Mass."). The green-winged teal, a male, is almost certainly the bird which spent *last* winter in the same company: the hundreds of tame mallards at Forest Park, Springfield.) — A. M. Bagg, H. M. Bagg, Vernon Bagg, J. H. Conkey, Mrs. A. L. Kinne, A. B. Mitchell, D. Riedel, L. Riedel, R. D. Ross.

32. Mt. Greylock, Mass. (highest mountain in the state: South Williamstown (1020 ft.) to summit (3491 ft.) via Roaring Brook trail, returning by Stony Ledge trail; hemlock-deciduous woods 15%, spruce-balsam-deciduous woods 85%.) — Dec. 20; 8 a.m. to 2 p.m. Clear; temp. 4° to 20°; calm at bottom, occasional light NW wind at top; ½ inch powder snow at base, 5-12 inches at summit; all still and most running water frozen. Three observers together. Total hours, 6; total miles, 9 (on foot). Ruffed grouse, 3; downy woodpecker, 4; blue jay, 1; black-capped chickadee, 8; golden-crowned kinglet, 9; unidentified finch, 1 (flying over). **Total,** 6 species; 26 individuals. Many signs of mice, shrews, snowshoe rabbits and foxes, but scarcity of birds is typical of Greylock at this season; weather could not have been more nearly ideal. — George Allen, Robert Crane, Bartlett Hendricks.

33. Newburyport, Mass. (Plum Island and the Newburys, south to Topsfield, east to Castle Hill, Ipswich, west to Groveland and the Merrimac River, as in the last 8 years). — Dec. 28; 6:45 a.m. to 5:15 p.m. Partly cloudy; wind NW, increasing, strong by p.m.; temp. 18° to 32°; ground covered with 15 to 36 in. of snow; many back roads un-

plowed. Seventeen observers in 5 groups. Total miles, about 200 by car, only 10 on foot. Common loon, 46; Holboell's grebe, 1; horned grebe, 6; mallard, 1; black duck, 1900; green-winged teal, 1; greater scaup duck, 416; Am. golden-eye, 739; buffle-head, 94; old-squaw, 108; white-winged scoter, 100; surf scoter, 2; Am. merganser, 2; red-breasted merganser, 35; red-tailed hawk, 1; red-shouldered hawk, 6; bald eagle, 10; sparrow hawk, 3; ruffed grouse, 1; great black-backed gull, 6; herring gull, 1325; ring-billed gull, 4; Bonaparte's gull; razor-billed auk, 1; dovekie, 1; mourning dove, 2; long-eared owl, 1; yellow-shafted flicker, 14; hairy woodpecker, 13; downy woodpecker, 25; horned lark (northern), 33; blue jay, 296; Am. crow, 464; black-capped chickadee, 273; white-breasted nuthatch, 3; brown creeper, 16; robin, 9; hermit thrush, 1; golden-crowned kinglet, 14; cedar waxwing, 6; northern shrike, 1; starling, 800; myrtle warbler, 74; English sparrow, 94; eastern meadowlark, 3; purple finch, 9; Am. goldfinch, 17; eastern towhee, 2 (♂ regular at Maddock's feeder, ♀ in Topsfield); Savannah sparrow, 1; slate-colored junco; 481; Oregon junco, 1 (♂ at Maddock's feeder; black head and brown back noted); tree sparrow, 326; chipping sparrow, 1 (at DuBois's feeder); field sparrow 6, white-throated sparrow, 41; fox sparrow, 17; swamp sparrow, 1; song sparrow, 36. **Total,** 57 species, approximately 7900 individuals. — Donald Alexander, Mr. & Mrs. Arthur Argue, James Baird, Lois Batchelder, Eleanor Cooley, Mrs. Frank DuBois, Frances T. Elkins, Kimball C. Elkins, Elmer Foye, Ludlow Griscom, James Kelly, Dr. and Mrs. Stephen Maddock, Nathaniel Nash IV, C. P. Preston, Chandler S. Robbins.

34. Northampton, Mass. (the same circle as in the past 13 years; most of time spent near houses or along edges of fields). — Dec. 21. Cloudy; temp. 25° to 35°; wind very light, variable; snow old and thin, in patches; hardly any open water. Sixty-seven observers, 34 at or near their homes; and 33 afield in 20 parties, 9 with cars; 1 driving 67 miles, others less. Total miles on foot, at least 33. Black duck, 100 (est.); Am. merganser, 8; sharp-shinned hawk, 1; Cooper's hawk, 1; rough-legged hawk, 1; marsh hawk, 1; sparrow hawk, 6; ruffed grouse, 25; herring gull, 2; mourning dove, 2; screech owl, 1; horned owl, 3; belted kingfisher, 1; yellow-shafted flicker, 5; pileated woodpecker, 3; yellow-bellied sapsucker, 1 (at an Amherst feeder from Dec. 2 to Jan. 5); hairy woodpecker, 17; downy woodpecker, 79; horned lark (northern), 45; blue jay, 208; Am. crow, 350 (est.); black-capped chickadee, 409; white-breasted nuthatch, 71; red-breasted nuthatch, 1; brown creeper, 27; winter wren, 1; brown thrasher, 1 (appeared in Amherst about Dec. 15, found dead Jan. 4); robin, 5; eastern bluebird, 2; golden-crowned kinglet, 34; ruby-crowned kinglet, 1 (at an Easthampton feeder from Dec. 8 to Jan. 3); cedar waxwing, 3; starling 1200 (est.); English sparrow, 600 (est.); cowbird, 18 (together); dickcissel, 1 (at an Amherst feeder from Nov. 25 to Jan. 7); evening grosbeak, 1; purple finch, 1; redpoll, 35 (together); Am. goldfinch, 267; Savannah sparrow, 1 (perfectly seen — S. A. E., Jr.); slate-colored junco, 550 (est.); tree sparrow, 800 (est.); field sparrow, 1; white-throated sparrow, 61 (!); swamp sparrow, 3; song sparrow, 48; snow bunting, 1 (heard over woods near where 25 had been seen on Dec. 16). **Total,** 48 species; approximately 5003 individuals. Conditions excellent for big counts of small birds. Strangely, no pheasants; but 2 red-shouldered hawks were seen, Dec. 29; a catbird until Dec. 16; a hermit thrush until Dec. 14; 3 *other* ruby-crowned kinglets until Dec. 14 and 15; a northern shrike, 2 meadowlarks, and 2 red-wings, on Dec. 19; a towhee until Dec. 13; and single fox sparrows on Dec. 16 and 27. — Paul Adams, Mrs. Howard Alcorn, Mrs. J. W. Anderson, A. M. Bagg, J. L. Bagg, Prof. and Mrs. Theodore Baird, Michel Baroud, Larry Bartlett, Mrs. R. S. Bracewell, Jerry Brown, R. M. Clark, R. L. Coffin, L. S. Combs, Isabelle Connor, D. H. Crompton, Mrs. M. A. Dickinson, Jr., S. A. Eliot, Jr., Mr. and Mrs. R. W. Fessenden, Reginald French, Elmer Gardner, Dwight and John Graves, Cora Grover, Mr. and Mrs. L. J. Halberstadt, Caroline E. Hamilton, Mrs. C. D. Harris, Mrs. Ralph Harris, Mrs. W. S. Hawley, Mrs. C. H. Hood, J. L. Huntington, Mrs. J. T. Kentfield, A. S. Kinney, Donald LaCroix, Mrs. Dudley Lloyd, Mrs. Karl Loewenstein, E. A. Mason, Mrs. John Miller, Esther J. Pollard, Mary T. Pomeroy, Mr. and Mrs. D. A. Riedel, Mr. and Mrs. E. B. Risley, James Rogers, Jr., Dr. and Mrs. F. A. Saunders, Marie Schurr, Jane and John A. Sessions, Robert W. Smart, Mrs. Felix Southiere, Mr. and Mrs. E. C. Staples, Mrs. H. L. Sweetman, Mrs. G. E. Taylor, P. S. Thayer, Wallace Torrey, Mrs. Geo. Tyler, Mrs. Seth Wakeman, Mrs. W. S. Welles, Mr. and Mrs. P. L. Wheelock, Alice M. Woods, Richard Wright.

35. Pittsfield, Mass. (woods and fields south and west of city; woods 60%, fields 40%). — Dec. 27; 8 a.m. to dark. Snow flurries in a.m., partly cloudy in p.m.; temp. 22° to 24°; wind W, light snow 16 in. deep; all still water frozen. Eighteen observers, 10 at feeding-stations, 8 together on foot in a.m. Total party-hours, 59; total miles, 4 (on foot). Hawk (sp.), 1 (seen at a distance during snow-flurry); hairy woodpecker, 3; downy woodpecker, 6; blue jay, 9; black-capped chickadee, 62; white-breasted nuthatch, 9; brown creeper, 1; golden-crowned kinglet, 6; starling, 220; English sparrow, 32; eastern towhee, 1 (a daily visitor at McCarty's feeder; very rare in winter); slate-colored junco, 8 (unusually large number); tree sparrow, 16. **Total,** 13 species; 374 individuals. (A screech owl was picked up alive on a street, Dec. 24; 3 cedar waxwings were seen by Minneci, Dec. 26; there was only one report of evening grosbeaks all December. — George Allen, Mr. and Mrs. Donnell D. Mac-

Carthy, O. P. McCarty, Phillip Daoust, Mr. and Mrs. E. J. Fitz, Mrs. James E. Gregg, David Green, Paul Green, Mrs. Bartlett Hendricks, Evan Hendricks, Mrs. H. S. Hubbard, Mr. and Mrs. Saul Minneci, Gladys Schumacher, Mr. and Mrs. Leonard E. Sweitzer (Hoffman Bird Club).

36. Quincy, Mass. (shore 55%, salt marsh 15%, open woods and park 25%, residential 5%) — Dec. 27; 7 a.m. to 4 p.m. Cloudy with snow showers; visibility 10 mi., 1 mi. when snowing; temp. 28°; wind NNE, 40 m.p.h., dropping to 15 m.p.h.; 6-in. new snow on 8-in. old snow, following NE storm of previous day. Two parties of 2 and 1 of 3 joined at 10:00 to form 1 party of 7; in p.m., 1 party of 3 and 1 of 6. Total hours, 15 (on foot); total miles, 19½ (30 additional miles in car transporting parties). European cormorant, 1; mallard, 2; black duck, 216; greater scaup duck, 2000 (est.); Am. golden-eye, 400 (est.); buffle-head, 74; white-winged scoter, 5; red-breasted merganser, 4; sparrow hawk, 1; ring-necked pheasant, 3; glaucous gull, 1 (7 observers); great black-backed gull, 11; herring gull, 1700 (est.); ring-billed gull, 1; long-eared owl, 1; yellow-shafted flicker, 1; downy woodpecker, 1; blue jay, 24; Am. crow, 16; black-capped chickadee, 27; brown creeper, 1; golden-crowned kinglet, 5; cedar waxwing, 48; starling, 279; English sparrow, 123; purple finch, 3; Am. goldfinch, 9; slate-colored junco, 46; tree sparrow, 8; white-throated sparrow, 1; song sparrow, 6. **Total,** 31 species; 5518 individuals. (Seen within area during the week: old-squaw, 33; European black-headed gull, 1 (S.H., A.D.W.); northern shrike, 1.) — Gertrude Allen, Louise Mayo, Ruth Wright, Ruth Higginbotham, Sibley Higginbotham, George Wilson, Robert Fox, Donald Whitehead, A. Donald West.

37. Sharon, Mass. (entirely within 200 acres of Moose Hill Bird Sanctuary; mature deciduous woodland 50%; woodland borders containing introduced plantings 50%). — Dec. 27; dawn to dusk. Overcast, with intermittent snow; temp. 30°; wind NE, 13-18 m.p.h.; ground covered with 23-25 in. of newly fallen snow; trees and shrubbery bent over with weight of ice and snow. Total miles, 4 (on skis). Sharp-shinned hawk, 1; ruffed grouse, 4; mourning dove, 15; yellow-shafted flicker, 1; downy woodpecker, 3; blue jay, 6; Am. crow, 1; black-capped chickadee, 14; white-breasted nuthatch, 2; hermit thrush, 2; golden-crowned kinglet, 3; Am. goldfinch, 10; slate-colored junco, 78; tree sparrow, 7; white-throated sparrow, 1; song sparrow, 2. **Total,** 16 species; 150 individuals. Evidently due to a plentiful food supply, the severe blizzard recently sweeping the eastern states seems to have had no appreciable effect in reducing the numbers of birds frequenting the sanctuary. — John V. Dennis.

38. Ware, Mass. (center of town east to Hardwick and West Brookfield; south on Ware River to Palmer; north along Muddy Brook to Hardwick Pond; lower Quabbin Reservoir area; town gardens 5%, open farmland 40%, deciduous woodland 20%, pine woodland 5%, marsh 10%, reservoir watershed 20%). — Dec. 21; 8 a.m. to 4 p.m. Lightly overcast; temp. 22° to 40°; wind W, 1 to 20 m.p.h.; ground bare; Quabbin Reservoir and rapids of rivers and brooks open. Fourteen observers in 5 parties. Total hours, 20 (on foot); total miles, 25 (on foot). Common loon, 1; black duck, 131; Am. merganser, 80; red-tailed hawk, 4; red-shouldered hawk, 1; bald eagle, 8 (2 ad., 6 im.); ruffed grouse, 25; herring gull, 14; belted kingfisher, 1; hairy woodpecker, 6; downy woodpecker, 13; blue jay, 88; Am. crow, 33; black-capped chickadee, 211; white-breasted nuthatch, 15; brown creeper, 4; robin, 1; golden-crowned kinglet, 6; starling, 183; English sparrow, 77; Am. goldfinch, 71; red-eyed towhee, 1 ♂ (Leslie Campbell); slate-colored junco, 73; tree sparrow, 84; field sparrow, 2. **Total,** 25 species; 1133 individuals. (Seen in area Dec. 22: winter wren, 1; Dec. 28: pileated woodpecker, 1; white-throated sparrow, 3; fox sparrow, 2.) — L. G. Albertine, M. E. Albertine, S. T. Berube, W. Berube, Leonard Campbell, Leslie Campbell, D. D. Conkey, N. Descoteaux, L. R. Marland, L. Millier, D. Sampson, E. Sampson, J. Shea, M. A. Shea.

39. Worcester, Mass. (a circle with 15-mile diameter stretching from Worcester to Clinton and including most of Wachusett Reservoir. Most of time spent along roadsides.) — Dec. 24; 9:20 a.m. to 4:15 p.m. Fair; wind NW, 5 to 25 m.p.h.; temp. 22°; ground covered with 7½-in. new snow, soft and drifting; ponds about half open. Observers together. Total miles, 46 (45 by car, 1 on foot). Mallard, 20 (feral); black duck, 104; Am. merganser, 38; Cooper's hawk, 1; red-tailed hawk, 1; herring gull, 1; belted kingfisher, 1; downy woodpecker, 1; blue jay, 10; Am. crow, 4; black-capped chickadee, 6; northern shrike, 1; starling, 68; English sparrow, 21; Am. goldfinch, 15; slate-colored junco, 8; tree sparrow, 5; song sparrow, 1. **Total,** 18 species; 306 individuals. — Davis H. Crompton, Michel Baroud, William Nutting.

40. South Kingstown and Narragansett, R. I. (deciduous woods 20%, brushy fields 30%, open fields 30%, marshes and shore 20%). — Dec. 28; 7 a.m. to 4:30 p.m. Mostly clear with snow flurries in p.m.; temp. 25° to 35° (max.) to 30°; wind NW, gentle to 8 m.p.h. in p.m.; ground covered by 2-12 in. of crusted snow; fresh ponds frozen and brackish ponds partly frozen. Five observers in 1 car with short sallies in field (mostly as 1 party); 1 observer at a feeding station. Total party-hours, 11 (7 afoot, 4 in car); total miles, 75 (5 on foot, 70 in car). Common loon, 3; red-throated loon, 7; Holboell's grebe, 1; horned grebe, 18; western (or crested?) grebe, 1 (seen at 200 yards by all observers through 20 x 50 telescope in good light; yellow

bill, long slender white neck, and size larger than accompanying Holboell's grebe noted; as the western grebe and the European crested grebe are indistinguishable in the field and as there are no specimens of either species collected in the northeastern states, this bird can only be listed as either one or the other); European cormorant, 82; Canada goose, 19; mallard, 1; black duck, 227; Am. golden-eye, 173, buffle-head, 6; Am. eider, 1; white-winged scoter, 9; surf scoter, 2; hooded merganser, 1; Am. merganser, 35; red-breasted merganser, 225; Cooper's hawk, 1; marsh hawk, 4; sparrow hawk, 3; killdeer, 1; purple sandpiper, 3; red-backed sandpiper, 12; great black-backed gull, 47; herring gull, 661; ring-billed gull, 17; Bonaparte's gull, 1162; mourning dove, 44; belted kingfisher, 2; yellow-shafted flicker, 4; hairy woodpecker, 1; downy woodpecker, 5; horned lark (northern), 88; blue jay, 17; Am. crow, 231; black-capped chickadee, 81; white-breasted nuthatch, 2; catbird, 2; robin, 18; hermit thrush, 5; bluebird, 5; starling, 286; myrtle warbler, 74; English sparrow, 43; eastern meadowlark, 57; red-wing, 8; cowbird, 107; Am. goldfinch, 28; eastern towhee, 2; Savannah sparrow, 6; junco, 105; tree sparrow, 103; field sparrow, 2; white-throated sparrow, 88; fox sparrow, 8; swamp sparrow, 1; song sparrow, 13; Lapland longspur, 1; snow bunting, 9. **Total,** 59 species; approximately 4168 individuals. (The small number of ducks was largely due to the duck season being open.) — F. Gairloch, H. Gates, I. Gates, M. Heath, M. Rollins, D. Kraus (Little Rest Bird Club).

41. Tiverton and Little Compton, R. I., and Acoaxet, Mass. (territory same as previous years). — Dec. 28; 7 a.m. to 5:30 p.m. Partly cloudy with moderate to fresh NW wind in a.m.; temp. 25°; 20-minute snow-squall at 1 p.m.; clear in p.m., with strong NW wind. Ground covered with 4-8 in. of crusted snow, Small ponds frozen tight, larger ones half open. Three observers together in one car. Total hours afoot, 7; total miles, 58 (8 by foot, 50 by car). Common loon, 11; red-throated loon, 7; Holboell's grebe, 3; horned grebe, 13; European cormorant, 350; mute swan, (wild residents) 7; Canada goose, 12; mallard, 4; black duck, 70; gadwall, 1 ♀; baldpate, 41; pintail, 9; redhead, 5; greater scaup duck, 425; Am. golden-eye, 275; buffle-head, 9; king eider, 3 ♀s; white-winged scoter, 375; surf scoter, 125; Am. scoter, 45; Am. merganser, 21; red-breasted merganser, 16; Cooper's hawk, 1; red-tailed hawk, 1; rough-legged hawk, 1; marsh hawk, 5; sparrow hawk, 1; Am. coot, 29; red-backed sandpiper, 260; sanderling, 14; great black-backed gull, 15; herring gull, 400; ring-billed gull, 7; mourning dove, 48; barn owl, 1 (regular resident); flicker, 10; hairy woodpecker, 2; downy woodpecker, 4; horned lark, 117; blue jay, 16; Am. crow, 220; black-capped chickadee, 18; brown creeper, 1; hermit thrush, 1; starling, 300; myrtle warbler, 100; English sparrow, 65; meadowlark, 81; cowbird, 30; goldfinch, 8; Savannah sparrow, 12; vesper sparrow, 2; slate-colored junco, 52; tree sparrow, 125; chipping sparrow, 1; field sparrow, 13; white-throated sparrow, 20; fox sparrow, 2; swamp sparrow, 3; song sparrow, 24; Lapland longspur, 9; snow bunting, 1. **Total,** 62 species; 3847 individuals. The gadwall was observed by all three members of the party at close range and under good light conditions. The three female king eiders were studied with a 36X telescope and the short bill and concave profile carefully noted. Past experience has shown the king eider to be as common a bird as the Am. eider in this particular spot. The chipping sparrow was studied at leisure from about ten feet at a feeding station. — Richard Bowen, Robert Brayton, Henry M. Parker.

42. Fairfield, Conn. (Housatonic River to Saugatuck River, including Stratford, Bridgeport, Fairfield, and Westport; beach 40%, deciduous woodland 25%; salt marsh 15%, town suburbs 15%, open woodland 5%). — Dec. 20; 7 a.m. to 5 p.m. Fair; wind NW, 15 m.p.h.; temp. 14° to 35°; ground bare; reservoirs and ponds frozen; tidal estuaries open. Nine observers in 3 parties. Total hours, 23; total miles, 95 (80 by car, 15 on foot). Common loon, 8; red-throated loon, 1; Holboell's grebe, 1; horned grebe, 25; great blue heron, 4; black-crowned night heron, 1; mute swan, 3 (wild existence); mallard, 7; black duck, 420; green-winged teal, 3; greater scaup duck, 250; Am. golden-eye, 600; buffle-head, 55; old-squaw, 500; white-winged scoter, 700; surf scoter, 4; hooded merganser, 2; Am. merganser, 1; red-breasted merganser, 22; bald eagle, 1 (F.N.); marsh hawk, 1; sparrow hawk, 10; ring-necked pheasant, 2; killdeer, 10; great black-backed gull, 4; herring gull, 1500; ring-billed gull, 8; Bonaparte's gull, 10; mourning dove, 21; short-eared owl, 1; belted kingfisher, 2; yellow-shafted flicker, 1; hairy woodpecker, 2; downy woodpecker, 4; horned lark, 45 (northern, 43, yellow line seen distinctly; prairie, 2, white line seen distinctly — F.N.); blue jay, 5; Am. crow, 65; black-capped chickadee, 19; white-breasted nuthatch, 4; brown creeper, 2; winter wren, 1; robin, 2; hermit thrush, 3; eastern bluebird, 2; golden-crowned kinglet, 11; ruby-crowned kinglet, 1; starling, 200; English sparrow, 120; eastern meadowlark, 1; red-wing, 2; cardinal, 1; Am. goldfinch, 3; Savannah sparrow, 9; slate-colored junco, 31; tree sparrow, 100; field sparrow, 10; white-crowned sparrow, 2 (E. B. L., G.W.); white-throated sparrow, 52; swamp sparrow, 3; song sparrow, 38. **Total,** 60 species (1 additional subspecies); approximately 4916 individuals. (Seen in area Dec. 21: barred owl, 1; Dec. 27: saw-whet owl, 1; Dec. 28: red-shouldered hawk, 1; sharp-shinned hawk, 1.) — Dominick D'Ostilio, Mr. and Mrs. Edward B. Lang, Mrs. Harry Long, Frank Novak, John L. Radel, Jr., Sally Tate, Gilbert Waldbauer, J. Reid Williamson (Fairfield Audubon Society).

43. Hartford, Conn. (territory within 7½ miles of center of city; open fields, marshes, hemlock groves, deciduous growth, Connecticut River and ponds). — Dec. 27; dawn to dusk. High clouds, scattered to broken; temp. 26° to 34°; ground covered with 18-in. snow; Conn. River partially open; ponds frozen. Thirty-one observers in 12 parties. Total hours, 62; total miles, 112½ (46 on foot, 66 by car). Mallard, 2; black duck, 31; Am. merganser, 178; sharp-shinned hawk, 2; Cooper's hawk, 3; red-shouldered hawk, 9; bald eagle, 2; sparrow hawk, 14; ring-necked pheasant, 21; herring gull, 112; mourning dove, 51; screech owl, 1; flicker, 10; hairy woodpecker, 10; downy woodpecker, 54; horned lark, 119; blue jay, 125; Am. crow, 192; black-capped chickadee, 162; white-breasted nuthatch, 47; brown creeper, 6; winter wren, 1; catbird, 1; robin, 1; bluebird, 9; golden-crowned kinglet, 2; ruby-crowned kinglet, 2; cedar waxwing, 15; starling, 1724; myrtle warbler, 28; English sparrow, 580; eastern meadowlark, 9; redwing, 27; bronzed grackle, 1; cowbird, 5; purple finch, 13; pine siskin, 1; goldfinch, 10; vesper sparrow, 4; slate-colored junco, 705; tree sparrow, 640; field sparrow, 15; white-throated sparrow, 68; fox sparrow, 1; swamp sparrow, 1; song sparrow, 106. **Total,** 46 species; 5120 individuals. — S. Adler, Mrs. Hilda Amidon, Mrs. H. P. Austin, Helen Ball, Mrs. Warren Ball, Mrs. P. Barnes, F. T. Bashour, Mr. and Mrs. E. A. Bergstrom, E. Chittenden, Edith Downey, P. E. Fellows, Mr. and Mrs. L. I. French, R. Goodell, R. Keirstead, H. Liebe, E. A. Maines, J. O'Brien, G. H. Parks, A. G. Powers, Doris Purinton, Mrs. T. B. Rhines, Mr. and Mrs. R. Risley, Mr. and Mrs. T. Risley, Mrs. R. Tucker, E. Wadstrom, Nancy West, Dr. L. Whittles (Hartford Bird Study Club).

44. Litchfield, Conn. (area including village, east on Northfield Road, south to Bantam Lake, west on Milton Road, north to Goshen and Torrington; open fields and woods, feeding stations). — Dec. 28; 8:30 a.m. to 4:30 p.m. Fair; snow 25 in. deep; wind NW, 25-38 m.p.h.; temp. 20°. Seventeen observers, 8 at feeding stations, 4 in 2 parties, 5 singly. Total hours, 26; total miles, 41 (28 by car, 10 on foot, 3 on skis). Mallard, 61 (feral and resident); black duck, 1; pintail, 1; ring-necked pheasant, 7; horned owl, 1; hairy woodpecker, 6; downy woodpecker, 28; blue jay, 47; Am. crow, 27; black-capped chickadee, 127; white-breasted nuthatch, 29; brown creeper, 7; robin, 1; golden-crowned kinglet, 6; cedar waxwing, 27; starling, 24; English sparrow, 155; purple finch, 2; slate-colored junco, 162; tree sparrow, 99; white-throated sparrow, 4; song sparrow, 1. **Total,** 22 species; 823 individuals. (Seen Dec. 18: pileated woodpecker, 2; pine grosbeak, 2 by Mrs. Norman Chapin; Dec. 20: bald eagle, winter wren, ruby-crowned kinglet; Dec. 22: pine siskin; Dec. 27: catbird; Dec. 29: robin, 4; purple finch, 5.) — R. H. Boyd, Josephine Brewster, Mrs. A. W. Clock, Mrs. J. D. Coffill, Macklin Cunningham, Mrs. C. B. Curtis, Mrs. H. F. Dunn, Earle S. Durham, Francis Enslin, Harold G. Hart, J. W. Lester, Sr. and Jr., Mrs. H. W. Marrin, Robert McKenzie, Mrs. E. S. Pulver, S. Dillon Ripley, Mary Webster.

45. New Haven, Conn. (including parts of Woodbridge, Bethany, Hamden, East and West Haven, and Branford townships). — Dec. 20; 7 a.m. to 5 p.m. Clear and sunny; ground bare; temp. 12° at start, 28° on return; slight to moderate NW wind; fresh ponds frozen. Eleven observers in 3 parties. Total man-hours, 85; total miles, 192 (57 on foot, 135 by car). Common loon, 5; horned grebe, 8; mallard, 4; black duck, 369; scaup duck (chiefly greater), 12,590; lesser scaup duck, 1 (♀ definitely identified at close range); Am. goldeneye, 210; old-squaw, 25; white-winged scoter, 51; surf scoter, 1; Am. merganser, 75; red-breasted merganser, 27; ducks too far to identify, 1000; red-tailed hawk, 2; red-shouldered hawk, 5; ring-necked pheasant, 1; killdeer, 3; herring gull, 605; ring-billed gull, 20; mourning dove, 1; belted kingfisher, 2; yellow-shafted flicker, 7; hairy woodpecker, 1; downy woodpecker, 18; blue jay, 20; Am. crow, 190; black-capped chickadee, 124; brown creeper, 1; white-breasted nuthatch, 7; robin, 6; hermit thrush 1; eastern bluebird, 17; starling, 790; myrtle warbler, 123; English sparrow, 180; eastern towhee, 1 (♂ studied at close range); slate-colored junco, 130; tree sparrow, 79; white-throated sparrow, 1; song sparrow, 13. **Total,** 39 species; 16,714 individuals. (Seen on Dec. 18: barred owl, 1; eastern meadowlark, 12.) — Alfred Bellinger, Peter Bellinger, Henry Bunting, Woodridge Constant, Charles Huntington, Frank Mathews, Robert Mathews, Lawrence Murphy, Ray Paynter, John Paul, Anne Sheldon.

46. Oxford, Conn. (Quaker Farms to Stevenson, down the Housatonic River to Squantuck and back; brush lands 50%, river front 20%, open land 20%, woods (mostly deciduous) 10%). — Dec. 21; 9 a.m. to 4 p.m. Partly cloudy; temp. 23° at start, 34° at return; wind W, 7-14 m.p.h.; ground bare; ponds frozen. Total hours, 7; total miles, about 13 (on foot). Red-shouldered hawk, 1; ruffed grouse, 3; herring gull, 3; yellow-shafted flicker, 4; hairy woodpecker, 3; downy woodpecker, 7; blue jay, 15; Am. crow, 4; black-capped chickadee, 37; white-breasted nuthatch, 6; brown creeper, 2; winter wren, 2; robin, 3; hermit thrush, 1; eastern bluebird, 9; golden-crowned kinglet, 6; myrtle warbler, 89; English sparrow, 10; slate-colored junco, 1; tree sparrow, 13; white-throated sparrow, 8; song sparrow, 10. **Total,** 22 species; 237 individuals. — Alfred P. Harger.

47. Saybrook, Conn. (Long Island Sound from Hammonasset beach to Lyme, and north along the Connecticut River to Hadlyme; shore 40%, marsh

30%, river 20%, mixed woods 10%). — Dec. 26; 7:30 a.m. to 2 p.m. Snowfall of 12 in., with 3 in. on ground at start; temp. 20° to 28°; coves, inlets and marshes frozen, with very high tides washing over marsh ice; wind 20-38 m.p.h.; visibility 30-600 ft., average 300. Three observers, together except for 1 hour. Total hours, 7½; total miles, 36 (30 by car, 6 on foot). Red-throated loon, 2; horned grebe, 2; black duck, 41; greater scaup duck, 70; Am. golden-eye, 4; white-winged scoter, 1; Am. merganser, 20; red-breasted merganser, 2; great black-backed gull, 4; herring gull, 58; ring-billed gull, 20; yellow-shafted flicker, 1; blue jay, 3; Am. crow, 4; white-breasted nuthatch, 1; eastern bluebird, 5; starling, 414; English sparrow, 2; eastern meadowlark, 10; slate-colored junco, 8; tree sparrow, 31; white-throated sparrow, 4; song sparrow, 22. **Total,** 23 species; 729 individuals. (Over 15,000 ducks were in the area 2 weeks before and were presumably still present; 34 species were found in 1 hour at Saybrook Point on Jan. 1. Count was halted at 2 p.m. as roads became impassable and visibility less than 60 ft.) — Irston R. Barnes, Henry C. Bunting, Frank P. Mathews.

48. Simsbury, Conn. (from center to State Park to West Simsbury reservoir, to Amos George's, Granby, to Great Pond Road, Simsbury; open farmland 40%, deciduous woodlots 30%, hemlock and white pine groves 20%, cedars 5%, marsh 5%). — Dec. 21; 9:30 a.m. to 12:30 p.m., 1:30 to 5:00 p.m. Fair; temp. 25°; wind W, 1-7 m.p.h.; ground bare except for snow patches in hemlock groves; all ponds frozen, streams open. Total miles, 15 (on foot). Ruffed grouse, 3; pileated woodpecker, 1 (a pair lives in this area); hairy woodpecker, 3; downy woodpecker, 5; horned lark (northern), 100; blue jay, 14; Am. crow, 9; black-capped chickadee, 26; white-breasted nuthatch, 6; brown creeper, 2; golden-crowned kinglet, 24; starling, 2000 (flock roosts in factory woods); English sparrow, 32; Am. goldfinch, 27; slate-colored junco, 56; tree sparrow, 5; white-throated sparrow, 8; song sparrow, 2. **Total,** 18 species; 2323 individuals. (Seen during the period: goshawk, 1; Cooper's hawk, 2; winter wren, 1; fox sparrow, 2.) — Eliot P. Dodge.

49. Brooklyn, N. Y. (the Narrows, Dyker Beach Park, East to Old Mill, New Lots, Cross-Bay Blvd., Jamaica Bay west of Cross-Bay, Riis Park, to Rockaway Pt. Jetty). — Dec. 21; 7 a.m. to 4:30 p.m. Cloudy to partly cloudy; temp. 28° to 35°; wind NW, variable. Seven groups of 3 or more observers, with 3 cars. Total hours, 70½ (49½ on foot, 21 by car); total miles, 80 (30 on foot, 50 by car). Common loon, 3; horned grebe, 2; gannet, 1; great blue heron, 2; black-crowned night heron, 1; Am. bittern, 1; mallard, 9; black duck, 518; redhead, 6; greater scaup duck, 5000; lesser scaup duck, 1; Am. golden-eye, 106; buffle-head, 28; old-squaw, 2; Am. scoter, 2; white-winged scoter, 3; Am. merganser, 2; red-breasted merganser, 500; sharp-shinned hawk, 2; Cooper's hawk, 1; red-tailed hawk, 1; marsh hawk, 12; sparrow hawk, 17; clapper rail, 1; killdeer, 6; greater yellow-legs, 2; purple sandpiper, 16; sanderling, 49; black-backed gull, 101; herring gull, 15,000; ring-billed gull, 180; laughing gull, 2; Bonaparte's gull, 650; European black-headed gull, 1 (adult); yellow-shafted flicker, 2; downy woodpecker, 12; horned lark (including at least 1 prairie), 29; blue jay, 2; Am. crow, 14; black-capped chickadee, 16; white-breasted nuthatch, 6; red-breasted nuthatch, 2; brown creeper, 17; long-billed marsh wren, 2; catbird, 1; robin, 7; Am. pipit, 104; (100 est. + 4); northern shrike, 1; starling, 22,000 (est.); myrtle warbler, 41; palm warbler, 1; English sparrow, 63,000 (est.); eastern meadowlark, 22; red-wing, 3; cowbird, 8; cardinal, 2; Am. goldfinch, 4; Ipswich sparrow, 3; Savannah sparrow, 42; sharp-tailed sparrow, 1; vesper sparrow, 3; slate-colored junco, 140; tree sparrow, 100; chipping sparrow, 1; field sparrow, 3; white-throated sparrow, 95; fox sparrow, 15; song sparrow, 147. **Total,** 68 species; 108,074 individuals. — A. Alperin, A. Bierman, Mr. and Mrs. M. L. Bloom, B. Brennan, G. Carleton, R. Clermont, W. Ferguson, R. Grant, M. Jacobson, Mr. and Mrs. A. Jones, E. Levine, W. Lidicker, W. Sedwitz, J. Soll, T. Tengwall, Jr., P. Wells, E. J. Whelen, J. Yrizarry.

50. Hampton Bays to Bridgehampton, L.I., N.Y. — Dec. 22; 7 a.m. to 4:15 p.m. Clear; temp. 28° to 29°; wind N, moderate to light; fresh-water ponds and Mecox Bay frozen, other bays partly frozen. Common loon, 1; red-throated loon, 2; horned grebe, 12; gannet, 2; great blue heron, 6; mute swan, 22; Canada goose, 125; mallard, 1; black duck, 675 (est.); baldpate, 10; pintail, 2; scaup duck, 50; Am. golden-eye, 81; buffle-head, 57; old-squaw, 67; white-winged scoter, 52; surf scoter, 2; Am. scoter, 1; ruddy duck, 2; hooded merganser, 1; Am. merganser, 2; red-breasted merganser, 96; sharp-shinned hawk, 2; Cooper's hawk, 1; marsh hawk, 4; sparrow hawk, 1; Am. coot, 130; sanderling, 9; black-backed gull, 44; herring gull, 1430 (est.); ring-billed gull, 55; belted kingfisher, 2; yellow-shafted flicker, 1; downy woodpecker, 4; horned lark (northern), 10; blue jay, 1; Am. crow, 32; black-capped chickadee, 11; catbird, 1; robin, 2; hermit thrush, 2; eastern bluebird, 35; golden-crowned kinglet, 1; starling, 176; myrtle warbler, 129; English sparrow, 40; eastern meadowlark, 22; Am. goldfinch, 8; slate-colored junco, 15; tree sparrow, 4; white-throated sparrow, 7; song sparrow, 4. **Total,** 52 species; about 3452 individuals. — Arthur Cooley, LeRoy Wilcox.

51. Smithtown, L. I., N. Y. (T. J. White Estate, Nissequogue River, Short and Long Beaches, Stony Brook Harbor, and Old Field Point; marsh 10%, fields 15%, wooded swamps 20%, woods 25%, shore 30%). — Dec. 20; 3:30 a.m. to 4:50 p.m. Clear with excellent visibility; temp. 15° (at dawn)

to 34° (max.); ground bare; all ponds partly frozen. Three observers operating singly and together. Total miles, 45 (35 by car, 10 on foot). Common loon, 4; horned grebe, 13; pied-billed grebe, 1; great blue heron, 4; black-crowned night heron, 3; mute swan, 7; Canada goose, 2; mallard, 26; black duck, 315; baldpate, 35; pintail, 2; green-winged teal, 4; wood duck, 1 (drake studied at leisure by all); ring-necked duck, 80; greater scaup duck, 200; lesser scaup duck, 2; Am. golden-eye, 111; buffle-head, 8; old-squaw, 48; Am. scoter, 1; white-winged scoter, 360; surf scoter, 2; hooded merganser, 2; Am. merganser, 9; red-breasted merganser, 5; sharp-shinned hawk, 1; Cooper's hawk, 1; ring-necked pheasant, 2; Florida gallinule, 1 (heard cackling in same swamp where it wintered last year); Am. coot, 6; Wilson's snipe, 1; great black-backed gull, 15; herring gull, 1730; ring-billed gull, 2; laughing gull, 4 (3 ads. and 1 imm. standing on ice with herring gulls, studied at close range through 32X scope); screech owl, 2; long-eared owl, 1; belted kingfisher, 2; yellow-shafted flicker, 3; hairy woodpecker, 2; downy woodpecker, 18; phoebe, 1 (4th consecutive year! In same corner of marsh as in 1944 and 1946; bird active and called frequently — R. B. F.); blue jay, 47; crow, 849; black-capped chickadee, 142; white-breasted nuthatch, 18; winter wren, 4; Carolina wren, 2; robin, 33; hermit thrush, 1; eastern bluebird, 14; golden-crowned kinglet, 8; cedar waxwing, 2; starling, 95; myrtle warbler, 146; black-poll warbler, 1 (observed at 15 feet with 8X glasses; greenish back with dark longitudinal stripes, faintly streaked yellowish breast, and white wing-bars all easily noted — G. R.); English sparrow, 42; eastern meadowlark, 7; red-wing, 4; cardinal, 2; purple finch, 1; pine siskin, 1; Am. goldfinch, 62; slate-colored junco, 159; tree sparrow, 54; white-throated sparrow, 138; Lincoln's sparrow, 1 (studied for 5 min. through 40X scope while bird was sitting in a tree; buffy breast band and narrow white eye-ring plainly visible — G. R.); swamp sparrow, 11; song sparrow, 84. **Total,** 69 species; 4965 individuals. — Richard B. Fischer, Grier Ralston, Norton Smithe.

52. Southern Nassau County, N. Y. (Atlantic Beach to Jones Beach, north to Hempstead and Westbury). — Dec. 21; 5 a.m. to 6 p.m. Fair to cloudy; temp. 24° to 34°; wind SW to W to NW, 10 m.p.h.; ground bare, ice on ponds and streams. Twenty-nine observers in 8 parties. Total party-hours, 77; total party-miles, 380 (80 on foot, 300 by car). Common loon, 2; red-throated loon, 10; Holboell's grebe, 1; horned grebe, 53; gannet, 1; great blue heron, 22; black-crowned night heron, 10; Am. bittern, 4; mute swan, 12; Canada goose, 45; mallard, 207; black duck, 3950; gadwall, 4; European widgeon, 3; baldpate, 391; pintail, 302; green-winged teal, 74; shoveller, 10; greater scaup duck, 86; Am. golden-eye, 56; old-squaw, 92; white-winged scoter, 95; surf scoter, 2; Am. scoter, 17; ruddy duck, 2; hooded merganser, 1; red-breasted merganser, 97; sharp-shinned hawk, 4; Cooper's hawk, 4; red-tailed hawk, 1; red-shouldered hawk, 1; marsh hawk, 12; sparrow hawk, 24; ring-necked pheasant, 3; clapper rail, 1; Am. coot, 4; killdeer, 13; Wilson's snipe, 2; greater yellow-legs, 1; sanderling, 61; great black-backed gull, 299; herring gull, 8500 (est.); ring-billed gull, 39; mourning dove, 9; barn owl, 1; long-eared owl, 1; belted kingfisher, 3; flicker, 13; hairy woodpecker, 1; downy woodpecker, 13; horned lark, 126 (northern, 108; prairie, 18); blue jay, 91; crow, 206; black-capped chickadee, 95; white-breasted nuthatch, 8; red-breasted nuthatch, 3; brown creeper, 6; winter wren, 2; long-billed marsh wren, 1; catbird, 1; robin, 30; hermit thrush, 5; golden-crowned kinglet, 21; cedar waxwing, 7; starling, 4000 (est.); orange-crowned warbler, 1 (well seen; observer thoroughly familiar with species — J. R.); myrtle warbler, 548; English sparrow, 1000 (est.); eastern meadowlark, 38; red-wing, 38; cowbird, 40; cardinal, 2; house finch, 35 (introduced from California in 1940 and now an established resident); Am. goldfinch, 105; eastern towhee, 2; Ipswich sparrow, 1; Savannah sparrow, 32; sharp-tailed sparrow, 3; seaside sparrow, 3; vesper sparrow, 3; slate-colored junco, 292; tree sparrow, 342; chipping sparrow, 2; field sparrow, 49; white-throated sparrow, 120; fox sparrow, 5; swamp sparrow, 18; song sparrow, 117; snow bunting, 4. **Total,** 89 species (1 additional subspecies; approximately 21,961 individuals. (Also seen in area during preceding week: pied-billed grebe, brant, buffle-head, Am. merganser, goshawk, bob-white, woodcock, screech owl, yellow-throat, Lapland longspur.) — Robert S. Arbib, Jr., Dr. and Mrs. Benjamin C. Berliner, Theodore Burr, E. H. Costich, Mr. and Mrs. John J. Elliott, J. Emory, George Greller, Mrs. J. Halsey, Frank Hillier, Ray Jefferson, Dr. and Mrs. Heathcote Kimball, John H. Mayer, Mrs. H. Meinke, H. Meinke Jr., Edmund Morgan, Theodore Pettit, Jr., Mr. and Mrs. James Ritchie, George C. Rose, Mr. and Mrs. James Sector, Richard Sloss, Guy Coheleach, Miss H. Sullivan, Mr. and Mrs. Edwin Way Teale.

53. Western Long Island, N. Y. (15 mile circle; Flushing Bay to North Hills, Whitestone to Atlantic Beach; suburban New York City 30%, Atlantic Ocean coast 1%, coastal marshes 20%, fresh water 4%, deciduous woods 10%, evergreen woods 5%, open woods 30%). — Dec. 27; dawn to dusk. Partly cloudy, clearing in the early p.m.; strong NW wind diminishing in p.m.; temp. 29° to 35° F. Total area covered with record fall of snow, 25.8 in. having fallen in preceding 24 hours. All fresh water frozen. Eighteen observers in 10 parties. Total hours, 88; total miles, 71 (all mileage on foot; all roads completely blocked). Common loon, 3; horned grebe, 9; great blue heron, 5; black-crowned night heron, 13; mute swan, 1; mallard, 75; black

duck, 1519; gadwall, 4; European widgeon, 2; baldpate, 80; pintail, 25; green-winged teal, 20; shoveller, 3; canvas-back, 124; greater scaup duck, 3550; Am. golden-eye, 353; buffle-head, 86; old-squaw, 4; white-winged scoter, 8; Am. scoter, 1; ruddy duck, 1; hooded merganser, 2; Am. merganser, 36; red-breasted merganser, 112; sharp-shinned hawk, 1; Cooper's hawk, 3; red-tailed hawk, 6; Am. rough-legged hawk, 1; marsh hawk, 6; duck hawk, 1; pigeon hawk, 1 (seen through good binocular at close range; observer very familiar with the species — J. F.); sparrow hawk, 14; bob-white, 2; ring-necked pheasant, 4; clapper rail, 1; killdeer, 12; purple sandpiper, 4; sanderling, 42; great black-backed gull, 76; herring gull, 3200; ring-billed gull, 39; laughing gull, 3; Bonaparte's gull, 16; mourning dove, 65; barn owl, 1; screech owl, 6; long-eared owl, 3; short-eared owl, 1; belted kingfisher, 2; yellow-shafted flicker, 3; hairy woodpecker, 1; downy woodpecker, 40; horned lark, 175 (northern, 143; prairie, 32); blue jay, 72; Am. crow, 193; fish crow, 4; black-capped chickadee, 54; white-breasted nuthatch, 18; brown creeper, 8; winter wren, 3; long-billed marsh wren, 2; short-billed marsh wren, 1; catbird, 1; brown thrasher, 1; robin, 4; hermit thrush, 3; eastern bluebird, 1; golden-crowned kinglet, 5; Am. pipit, 4; cedar waxwing, 3; starling, 2320; myrtle warbler, 38; English sparrow, 732; eastern meadowlark, 5; red-wing, 21; rusty blackbird, 4; purple grackle, 30; bronzed grackle, 4; cowbird, 10; cardinal, 1; purple finch, 6; Am. goldfinch, 25; eastern towhee, 1; Savannah sparrow, 13; sharp-tailed sparrow, 2; slate-colored junco, 231; tree sparrow, 388; field sparrow, 39; white-crowned sparrow, 4 (observed in Idlewild area by same observer since fall migration — J. M.); white-throated sparrow, 259; fox sparrow, 8; swamp sparrow, 5; song sparrow, 222; Lapland longspur, 26; snow bunting, 35. **Total,** 95 species; approximately 14,571 individuals. — Elizabeth, William and William Jr. Astle; H. L. Bohn, John L. Bull, Edythe Bull, Herman Goebel, John Flavin, Andrew Meyerriecks, John Mayer, Mr. and Mrs. William Reid, Sr., William Reid, Jr., Norton Smithe, Frank B. Smithe, William Lidicker, Charles F. Wright, Samuel C. Yeaton (Queens County Bird Club).

[Another count covering part of the same territory was made on Dec. 22 by William W. Reid, Jr., who reported the following additional species: wood thrush, 1 (unmistakable; observed at 10 feet for 15 minutes; rufous head and large, round spots clearly seen; bird in perfect plumage and apparently in good physical condition). Total, 34 species, approximately 1224 individuals. — Ed.]

54. Bear Mountain, Harriman State Park, N. Y. (Bear Mountain and Iona Island south to Jones Point and west to Route 17, entire Park area; deciduous woods 34%, coniferous woods 4%, open fields 5%, swamp 44%, river 13%). — Dec. 21; 6:30 a.m. to 4:30 p.m. Cloudy to clear; temp. 26° at start, 33° at finish; wind WNW, 18-20 m.p.h.; ground bare; all inland lakes frozen. Ten observers in 5 parties. Total hours, 100; total miles, 110 (80 by car, 30 on foot). Mallard, 3; black duck, 134; Am. merganser, 165; red-tailed hawk, 1; red-shouldered hawk, 1; bald eagle, 1; marsh hawk, 1; duck hawk, 1; ruffed grouse, 6; ring-necked pheasant, 1; black-backed gull, 1; herring gull, 72; ring-billed gull, 2; horned owl, 1; yellow-shafted flicker, 1; pileated woodpecker, 2; yellow-bellied sapsucker, 1; hairy woodpecker, 4; downy woodpecker, 6; blue jay, 20; Am. crow, 23; black-capped chickadee, 115; white-breasted nuthatch, 9; red-breasted nuthatch, 2; winter wren, 1; long-billed marsh wren, 2; golden-crowned kinglet, 1; starling, 41; English sparrow, 66; cardinal, 3; pine siskin, 6; Am. goldfinch, 23; slate-colored junco, 165; tree sparrow, 33; white-throated sparrow, 10; swamp sparrow, 1; song sparrow, 22. **Total,** 37 species; 947 individuals. — Robert Deed, Stanley Grierson, Thomas Hancock, John Kenney, Peter Smith, Ralph Smith, Martin Uhleman, Fred Ulmer, Arthur Weeks, John Orth.

55. Bronx-Westchester Region, N. Y. (northern Bronx and southern Westchester counties as far as Irvington, Scarsdale, and Rye). — Dec. 21. Clear; temp. 18° (min.) to 30° (max.); wind NW, light; ground bare; inland fresh-water ponds frozen. Forty-four observers in 6 parties. Total hours, 66 (15 by car, 51 on foot); total miles, 58 (18 by car, 40 on foot). Common loon, 6; red-throated loon, 1; Holboell's grebe, 1; horned grebe, 5; pied-billed grebe, 2; European cormorant, 3 adults (seen through high-powered telescope — J. B., A. C., H. D., R. P.); great blue heron, 26; black-crowned night heron, 97; Canada goose, 40; mallard, 126; black duck, 3260 (est.); baldpate, 1; pintail, 12; green-winged teal, 21; wood duck, 8; canvas-back, 200; greater scaup duck, 15,000 [(est.) — 3000 more than in any previous year]; lesser scaup duck, 2; Am. golden-eye, 385; buffle-head, 30; old-squaw, 23; white-winged scoter, 300 (est.); surf scoter, 12; ruddy duck, 12 (unusually large number for this time of year); hooded merganser, 54; Am. merganser, 173; red-breasted merganser, 485; sharp-shinned hawk, 4; Cooper's hawk, 2; red-tailed hawk, 23; red-shouldered hawk, 2; Am. rough-legged hawk, 2; marsh hawk, 1; duck hawk, 2; sparrow hawk, 21; ring-necked pheasant, 48; Virginia rail, 1; Am. coot, 2; killdeer, 33; Wilson's snipe, 2; purple sandpiper, 12; great black-backed gull, 27; herring gull, 10,130 (est.); ring-billed gull, 3; laughing gull, 1; mourning dove, 2; barn owl, 1; screech owl, 4; horned owl, 1; long-eared owl, 2; short-eared owl, 1; belted kingfisher, 10; yellow-shafted flicker, 6; hairy woodpecker, 33; downy woodpecker, 74; phoebe, 1 (second time in region); horned lark (northern), 1; blue jay, 151; Am. crow, 235; fish crow, 2; black-capped chickadee, 340 (est.);

tufted titmouse, 3; white-breasted nuthatch, 62; red-breasted nuthatch, 1; brown creeper, 30; winter wren, 7; long-billed marsh wren, 6; catbird, 2; robin, 11; hermit thrush, 1; eastern bluebird, 23; golden-crowned kinglet, 36; ruby-crowned kinglet, 3; Am. pipit, 3; cedar waxwing, 98 (including flock of 70); starling, 3000 (est.); myrtle warbler, 42; English sparrow, 635 (est.); eastern meadowlark, 32; red-wing, 15; rusty blackbird, 6; purple grackle, 1; bronzed grackle, 2; cowbird, 2; cardinal, 17; purple finch, 11; pine siskin, 19; Am. goldfinch, 77; eastern towhee, 4; Savannah sparrow, 25; sharp-tailed sparrow, 3; vesper sparrow, 3; slate-colored junco, 500 (est.); tree sparrow, 248; field sparrow, 79; white-crowned sparrow, 1 (third time — G. K.); white-throated sparrow, 350 (est.); fox sparrow, 14; swamp sparrow, 29; song sparrow, 268; snow bunting, 6. **Total,** 101 species; approximately 37,140 individuals. — G. Banner, J. Bernstein, J. Bull, G. Cant, I. Cantor, A. Cruickshank, H. Darrow, R. DeMars, W. Ephraim, W. Feigin, H. Feinberg, R. Fischer, D. Gershon, H. Goebel, S. Harriot, R. Herbert, J. Hickey, M. Isler, I. Kassoy, R. Kesner, J. Kieran, G. Komorowski, N. Levine, W. Norse, A. Peck, J. Philips, R. Pough, G. Ralston, M. Russak, A. Small, F. Smithe, A. Thomas, J. Tiffany, Dr. and Mrs. C. Vaurie, J. Wolff, C. Wright, A. Young, H. Young, and 5 members of the Graham School Bird Club.

56. Buffalo, N. Y. (centering on Grand Island; including Niagara River and adjacent areas; open farmland 40%, deciduous woods 20%, parks 5%, Niagara River and Buffalo Harbor 20%, cattail marshes 3%, city, suburban, and factory areas 12%). — Dec. 21; 7:30 a.m. to 7:30 p.m. Cloudy and dark; temp. 32° to 38°; wind SW, about 15 m.p.h.; creeks, ponds, and harbor open; no ice bridge in gorge at falls. Thirty-seven observers in 12 parties. Total hours, 103 (52 on foot); total miles 270 (63 on foot, 10 by boat, 197 by car). Common loon, 5; Holboell's grebe, 1; horned grebe, 9; pied-billed grebe, 1; double-crested cormorant, 1; great blue heron, 1; black-crowned night heron, 4; mallard, 89; black duck, 568; pintail, 2; ring-necked duck, 1; canvas-back, 885; redhead, 2; greater scaup duck, 3309; lesser scaup duck, 1; Am. golden-eye, 2561; buffle-head, 98; old-squaw, 180; white-winged scoter, 3; hooded merganser, 1; Am. merganser, 588; red-breasted merganser, 88; goshawk, 1; sharp-shinned hawk, 1; Cooper's hawk, 2; red-tailed hawk, 8; Am. rough-legged hawk, 2; bald eagle, 2; marsh hawk, 9; sparrow hawk, 23; ring-necked pheasant, 106; glaucous gull, 2; great black-backed gull, 29; herring gull, 5142; ring-billed gull, 422; Bonaparte's gull, 5367; little gull, 2; (dusky underwings clearly noted; second occurrence of this species on our census — H. D. M. and party); mourning dove, 16; screech owl, 4; great horned owl, 6; long-eared owl, 4; belted kingfisher, 3; flicker, 3; red-headed woodpecker, 3; hairy woodpecker, 17; downy woodpecker, 80; blue jay, 64; Am. crow, 72; black-capped chickadee, 146; white-breasted nuthatch, 30; brown creeper, 37; winter wren, 1; robin, 8; golden-crowned kinglet, 65; ruby-crowned kinglet, 1; cedar waxwing, 1; northern shrike, 1; starling, 3256; myrtle warbler, 1; English sparrow, 1132; cardinal, 8; goldfinch, 15; eastern towhee, 2; slate-colored junco, 113; tree sparrow, 348; white-throated sparrow, 1; song sparrow, 14. **Total,** 67 species; 24,968 individuals. — W. Almendinger, R. Andrle, A. Axtell, R. Axtell, T. L. Bourne, W. Brockner, M. Brown, W. Burch, B. Cooley, R. Drobitts, E. Emerson, J. Filor, D. Gamble, J. Glick, Mr. and Mrs. A. Heilborn, Mr. and Mrs. Klabunde, R. Knoble, C. Kogel, W. Meyers, H. D. Mitchell, L. Murphy, B. Nathan, D. Pause, R. Rosche, F. Rew, J. Savage, E. Seeber, H. Thorpe, A. Ulrich, E. Ulrich, W. Vaughan, Mrs. Wallace, G. Webster, M. Wendling, E. Windsor

57. Cortland, N. Y. (Tioughnioga River, south end of Skaneateles Lake, Gracie Swamp, and waterworks; lakes, ponds, river 10%, cultivated farmland 10%, semiopen country, frequently pastured, with scattered trees, open groves, little patches of woods and thickets of many kinds, little bogs, marshy places, streams and other habitats in small scattered patches 50%, mixed woodland, mostly unpastured and swampy, from young second growth to mature 30%). — Dec. 26; 7 a.m. to 6 p.m. Cloudy with frequent light snow squalls; temps. 16° to 20°; wind S, 2-20 m.p.h.; 3-in. snow on ground. Two observers separate. Total hours, 14 (10 on foot, 4 by car); total miles, 55 (10 on foot, 45 by car). Great blue heron, 1; mallard, 6; black duck, 230; ring-necked duck, 2; greater scaup, duck, 5; Am. golden-eye, 91; hooded merganser, 5; Am. merganser, 36; sharp-shinned hawk, 1; red-tailed hawk, 3; sparrow hawk, 1; ruffed grouse, 4; ring-necked pheasant, 1; Am. coot, 1; screech owl, 1; horned owl, 1; belted kingfisher, 1; downy woodpecker, 3; blue jay, 7; Am. crow, 29; black-capped chickadee, 37; white-breasted nuthatch, 5; brown creeper, 6; winter wren, 1; robin, 1; golden-crowned kinglet, 5; starling, 257; English sparrow, 180; red-wing, 2; slate-colored junco, 1; tree sparrow, 4; white-throated sparrow, 1; song sparrow, 2. **Total,** 33 species; 931 individuals. — Harold H. Axtell, Rachel C. Axtell.

58. Croton Point, N. Y. (woods 45%, marshes 35%, shore 15%, fields 5%). — Dec. 23; 8:30 a.m. to 4:15 p.m. Snowing moderately almost all the time, amounting to 5 in. by dusk; temp. 29°; wind NW, light; marshes and mouth of Croton River largely frozen, but Hudson River ice-free. Observers together most of time. Total miles, 4½ (afoot). Mallard, 1; black duck, 40; Am. golden-eye, 75; old-squaw, 1; hooded merganser, 5; Am. merganser, 5; sharp-shinned hawk, 1; bald eagle, 6; marsh hawk, 1; herring gull, 300; yellow-shafted flicker, 1; downy woodpecker, 5; blue jay, 2; Am. crow, 15;

blacked-capped chickadee, 35; brown creeper, 4; winter wren, 3; robin, 1; hermit thrush, 1; golden-crowned kinglet, 30; ruby-crowned kinglet, 1 (with a group of sparrows on edge of weedy field; white eye-ring and wing-bars observed); starling, 200; myrtle warbler, 2; English sparrow, 60; cardinal, 5; Am. goldfinch, 1; slate-colored junco, 50; tree sparrow, 50; field sparrow, 1; white-throated sparrow, 40; fox sparrow, 1; swamp sparrow, 4; song sparrow, 15. **Total,** 33 species; 962 individuals. — Richard B. Fischer, Eric Gluckman, Douglas Lent, Duncan MacKenzie, David Ridgway, Donald Starbuck.

59. Fort Plain, N. Y. (Mohawk River, valleys of Oak, Little Run, and Otsquene creeks; mixed deciduous and coniferous woods 58%, river swamps and flats 21%, open farm land 21%). — Dec. 28; 7:30 a.m. to 5:00 p.m. Cloudy, some sunlight at noon, snow squalls all day; temp. 27° to 20°; wind NW, 25-35 m.p.h.; 18 inches drifting snow; river frozen, except for swift channels; creeks frozen. Total hours, 9½ (on snow shoes); total miles, 10 (on snow shoes). Am. merganser, 7; ring-necked pheasant, 8; hairy woodpecker, 2; downy woodpecker, 5; Am. crow, 6; black-capped chickadee, 62; white-breasted nuthatch, 5; brown creeper, 5; golden-crowned kinglet, 2; starling, 84; English sparrow, 18; pine siskin, 2; slate-colored junco, 2; tree sparrow, 6. **Total,** 14 species; 214 individuals. (Fresh work of pileated woodpecker seen). — Douglas Ayres, Jr.

60. Geneva, N. Y. (area bounded by Junius on north, east side of Seneca Lake on east, Kashong on south, and Gorham on west; open farm land 50%, town suburbs 10%, mixed woods 25%, lake 15%). Dec. 28. Cloudy, clearing at times, with intermittent snow squalls; temp. 22° at start, 28° on return; wind W, strong; ground covered with snow; water frozen except Seneca Lake. Fourteen observers in 8 parties (4 observers watched feeding stations all day). Total hours, 39 (15 on foot; 24 by car); total miles, 89 (20 on foot, 69 by car). Common loon, 1; red-throated loon, 1; horned grebe, 30; pied-billed grebe, 2; mallard, 14; black duck, 195; redhead, 50; ring-necked duck, 1; canvas-back, 4; greater scaup duck, 1525 (est.); lesser scaup duck, 37; Am. golden-eye, 170; buffle-head, 19; Am. merganser, 42; red-breasted merganser, 6; Cooper's hawk, 1; red-tailed hawk, 1; red-shouldered hawk, 1; marsh hawk, 6; sparrow hawk, 1; ring-necked pheasant, 10; Am. coot, 3; great black-backed gull, 1; herring gull, 67; ring-billed gull, 92; mourning dove, 6; horned owl, 1; pileated woodpecker, 1; hairy woodpecker, 8; downy woodpecker, 13; blue jay, 1; Am. crow, 200; black-capped chickadee, 93; white-breasted nuthatch, 10; red-breasted nuthatch, 1; brown creeper 2; robin, 1; golden-crowned kinglet, 3; cedar waxwing, 15; starling, 330; English sparrow, 215; bronzed grackle, 2; cardinal, 3; Am. goldfinch, 4; slate-colored junco, 32; tree sparrow, 36. **Total,** 46 species; 3257 individuals. (Seen during the week: great blue heron, 1; redhead, 1000.) — Mr. and Mrs. Arthur Iselin, Nat Boynton, Stephen Eaton, Loren D. Ward, Mr. and Mrs. Francis H. Orcutt, Ethel Murden, Anne Burdis, Mrs. Arthur Laclare, Rose Murphy, Leora Dryer, William P. Van Eseltine, Marian L. Vandenburgh, (Eaton Bird Club).

61. Hamburg — Orchard Park — East Aurora, N. Y. (centering on Chestnut Ridge Park, and including Emery Park; open farmland 60%, public parks 10%, suburban areas 5%, deciduous woods 15%, cattail marsh 1%, evergreen woods 4%, small ponds and 1 mile of Lake Erie shore 5%). — Dec. 28; 7:30 a.m. to 4 p.m. Cloudy, snow squalls; temp. 15° to 29°; wind NW, 25 m.p.h.; snow varying in depth from ground cover to 1-foot drifts. Twenty-seven observers in 13 parties. Total hours, 77; total miles, 84 (on foot). Am. golden-eye, 4; Cooper's hawk, 1; red-tailed hawk, 2; marsh hawk, 1; sparrow hawk, 2; ruffed grouse, 6; ring-necked pheasant, 20; herring gull, 35; long-eared owl, 1; yellow-shafted flicker, 1; yellow-bellied sapsucker, 1; hairy woodpecker, 2; downy woodpecker, 22; blue jay, 11; Am. crow, 143; black-capped chickadee, 126; white-breasted nuthatch, 9; brown creeper, 5; eastern bluebird, 2; golden-crowned kinglet, 9; starling, 388; English sparrow, 428; red-wing, 2; cardinal, 7; common redpoll, 9; pine siskin, 1; Am. goldfinch, 2; slate-colored junco, 66; tree sparrow, 39; fox sparrow, 4; song sparrow, 2; Lapland longspur, 2; snow bunting, 610. **Total,** 33 species; 1963 individuals. — William Almendinger, W. Burch, Lucretia Creighton, Mr. and Mrs. James Creighton, Carolina deLeeuw, Gerald Diem, Mr. and Mrs. William Dugan, Mrs. W. D. Dugan, John Filor, Donald Gamble, Eleanor Jones, Robert Knoble, Clayton Knox, Mr. and Mrs. William McShane, Harold Mitchell, Kathryn Praemassing, F. G. Rew, F. M. Rew, Edward Seeber, Francis Tilley, Albert Wander, Lorina Wendt, Ellen Windsor, A. J. Wright II (Audubon Society of Buffalo).

62. Jamestown, N. Y. (center of town north to Gerry, east to Poland, south to Frewsburg, west to Lakewood; deciduous woods 15%, coniferous woods 10%, mixed deciduous and coniferous woods 50%, swampland 8%, fields 10%, streams and rivers 5%, marshes 2%). — Dec. 20; 6:30 a.m. to 4:30 p.m. Sunny and cold; temp. 10° to 35°; 0-3 in. snow on ground; most rivers and streams open, other water including lake frozen. Eight observers in 6 parties. Total hours, 16; total miles, 54 (34 by car, 20 on foot). Common loon, 1 (first winter record); black duck, 2 (1 dead on highway); Am. golden-eye, 7; sharp-shinned hawk, 1; ruffed grouse, 3 (fresh tracks); ring-necked pheasant, 20; mourning dove, 1; screech owl, 2; barred owl, 1 (heard); yellow-shafted flicker, 1; pileated woodpecker, 2; hairy woodpecker, 1; downy woodpecker, 9; blue jay, 8; black-capped chickadee, 78; white-breasted

nuthatch, 13; red-breasted nuthatch, 4; brown creeper, 17; winter wren, 5; robin, 2; golden-crowned kinglet, 14; ruby-crowned kinglet, 1 (red crown and eye ring noted at close range by D. Lenna, at feeding station in Lakewood; 1 seen and heard at close range at Frewsburg by Sundells on Dec. 7); cedar waxwing, 4; starling, 582; myrtle warbler, 1 (distinctly heard; first winter record); English sparrow, 120; cardinal, 3; Am. goldfinch, 6; slate-colored junco, 35; tree sparrow, 62; song sparrow, 5. **Total,** 31 species; 1011 individuals. (Seen in area during census period: mallard, 5; hooded merganser, 3; Cooper's hawk, 1; sparrow hawk, 1; horned owl, 1; red-wing, 1; cowbird, 2; chipping sparrow, 1 (first winter record). — C. Beal, D. Lenna, P. Lenna, C. Parker, D. Powers, R. A. Sundell, R. H. Sundell, A. Van Why.

63. Keuka Park, N. Y. (lake front, Keuka Lake from Penn Yan to Branchport via Bluff Point; Guyanoga Valley from County House Road to Branchport; Pinnacle Hill and surrounding area; open farm land 85%, deciduous woods 5%, hemlock groves 1%, red cedar grove 1%, upland pastures 5%, cattail marsh 3%). — Dec. 28; 7:30 a.m. to 4:30 p.m. Intermittent snow squalls; visibility from near zero to perfect; temp. 24° to 20° F.; wind W to NW, 20-35 m.p.h.; ½-in. snow on ground, drifting; ponds and small bays frozen. Seven observers in 5 parties. Total hours, 27 (20 on foot, 7 in car). Horned grebe, 6; pied-billed grebe, 1; black duck, 115; greater scaup duck, 2; lesser scaup duck, 1; Am. golden-eye, 60; buffle-head, 4; hooded merganser, 9; Am. merganser, 6; sharp-shinned hawk, 2; duck hawk, 1; ring-necked pheasant, 2; killdeer, 1; herring gull, 6; hairy woodpecker, 2; downy woodpecker, 12; blue jay, 8; Am. crow, 3; black-capped chickadee, 50; white-breasted nuthatch, 6; brown creeper, 2; golden-crowned kinglet, 10; starling, 150; English sparrow, 60; cardinal, 2; vesper sparrow, 1; slate-colored junco, 4; tree sparrow, 50; song sparrow, 2; snow bunting, 100. **Total,** 30 species; approximately 678 individuals. — F. K. Guthrie, Malcolm Lerch, Isora Lerch, Vireo Whitaker, Nellie Folts, Octavia Reed, Charles Spiker (Keuka Park Conservation Club).

64. Manhattan Island, N. Y. (same area as last year, plus starling roost at 125th Street and ferries in New York Bay; water 60%, city parks 40%). — Dec. 26. Heavy snow all day, 6 in. at start, 22 in. at finish; temp. 20° to 30°; wind N or NE. Eight observers in 6 parties. Total hours, 25 (21 on foot, 4 by ferry); total miles, 17 (9 on foot, 8 by ferry). Binoculars useless in snow except from ferry. Mallard, 32; black duck, 128; wood duck, 1; greater scaup duck, 10; surf scoter, 1 (seen from ferry); red-breasted merganser, 1; red-tailed hawk, 1; sparrow hawk, 1; ring-necked pheasant, 7; great black-backed gull, 4; herring gull, 210; ring-billed gull, 10; laughing gull, 1; Bonaparte's gull, 1; European black-headed gull, 1 (seen from ferry; observer has seen bird before at Brooklyn sewer — R. R.); belted kingfisher, 1; hairy woodpecker, 1; downy woodpecker, 7; Am. crow, 3; black-capped chickadee, 13; white-breasted nuthatch, 3; starling, 10,132; English sparrow, 30; red-wing, 1; rusty blackbird, 1; cowbird, 14 (all blackbirds at starling roost — R. G.); cardinal, 2; eastern towhee, 1 (J. T.); slate-colored junco, 62; tree sparrow, 4; white-throated sparrow, 29; fox sparrow, 5; song sparrow, 18. **Total,** 33 species; 10,736 individuals. — Richard Gershon, Daniel Heller, Stephen Oresman, John Persico, Robert Pierotti, Henry Ryan, Richard Ryan, John Tiffany.

65. Port Chester, N. Y. (Rye and White Plains to Stamford, Conn., Manursing Island, Rye and Kensico Lakes, Audubon Nature Center, etc.). — Dec. 21; 6:30 a.m. to 5:30 p.m. Cloudy; temp. 25° to 38° F.; wind NW, 10 m.p.h.; ground bare; ponds frozen, lakes mainly open. Twenty-five observers in 9 parties. Total hours, 117 (78 on foot); total miles, 130 (72 on foot). Common loon, 1; red-throated loon, 1; horned grebe, 6; cormorant (sp.), 7; great blue heron, 17; black-crowned night heron, 2; mute swan, 6; Canada goose, 22; brant, 1; mallard, 60; black duck, 350 (est.); baldpate, 2; shoveller, 1; ring-necked duck, 130; greater scaup duck, 37; Am. golden-eye, 160; buffle-head, 23; old-squaw, 6; white-winged scoter, 90; hooded merganser, 20; Am. merganser, 600 (est.); red-breasted merganser, 175; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 4; red-shouldered hawk, 6; marsh hawk, 1; sparrow hawk, 3; ruffed grouse, 5; ring-necked pheasant, 9; Am. coot, 14; killdeer, 8; spotted sandpiper, 1 (observed in flight and on shore of Kensico Lake at 40 ft. with 8x and 10x glasses — J. M., M. O., P. C. S.); purple sandpiper, 4; great black-backed gull, 4; herring gull, 550 (est.); ring-billed gull, 2; laughing gull, 2; mourning dove, 1; barn owl, 1; screech owl, 1; horned owl, 3; barred owl, 1; long-eared owl, 1; belted kingfisher, 2; yellow-shafted flicker, 5; pileated woodpecker, 2; yellow-bellied sapsucker, 1; hairy woodpecker, 11; downy woodpecker, 46; horned lark (northern), 17; blue jay, 115; Am. crow, 125 (est.); black-capped chickadee, 240 (est.); white-breasted nuthatch, 42; brown creeper, 14; winter wren, 4; robin, 18; hermit thrush, 2; eastern bluebird, 53; golden-crowned kinglet, 16; ruby-crowned kinglet, 2; Am. pipit, 5; cedar waxwing, 17; northern shrike, 1; starling, 540 (est.); myrtle warbler, 107; English sparrow, 450 (est.); eastern meadowlark, 4; grackle, 8; cowbird, 3; cardinal, 9; purple finch, 9; Am. goldfinch, 95; slate-colored junco, 230 (est.); tree sparrow, 120; white-throated sparrow, 53; fox sparrow, 3; swamp sparrow, 2; song sparrow, 28; snow bunting, 15. **Total,** 81 species; approximately 4754 individuals. (Seen in area Dec. 20: pied-billed grebe, 1; tufted titmouse, 2.) — Clare Beagle, Leonard J. Bradley, Stanley W.

Bromley, H. Hall Clovis, Mr. and Mrs. Wm. Bolton Cook, Glenn E. Coven, Mrs. Edward Easton, Mrs. Willis Geis, Joseph S. Lovering, Jr., Ernest T. Luhde, Ann C. Maples, James C. Maples, John E. Mayer, Mr. and Mrs. Charles E. Mohr, John Moxhay, Arthur S. Nyquist, Michael Oboiko, Mrs. Avery Rockefeller, John J. Roemer, Killian Rover, Mr. and Mrs. M. Stuart Roesler, P. Cecil Spofford.

66. Rochester, N. Y. (same area as in previous years). — Dec. 21; 7:30 a.m. to 5:00 p.m. Heavily overcast with low fog in early hours; temp. 33° at start, 34° at finish; moderate NW wind with occasional sleet; ½-in. snow on ground; ponds generally frozen with open water in creeks and large bays. Twenty-eight observers in 9 parties. Total hours, 53 (on foot); total miles, 57 (on foot). Common loon, 2; gannet, 1 (present since Nov. 18); mallard, 27; black duck, 224; green-winged teal, 2; ring-necked duck, 1; greater scaup duck, 450; lesser scaup duck, 200; Am. golden-eye, 47; buffle-head, 2; old-squaw, 14; white-winged scoter, 1; Am. merganser, 12; red-breasted merganser, 8; hooded merganser, 1; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 15; rough-legged hawk, 2; marsh hawk, 3; sparrow hawk, 11; ring-necked pheasant, 29; Virginia rail, 1 (observed at 8 ft. range at leisure —A.K., J.T., F.H., H.C.); Am. coot, 1; great black-backed gull, 6; glaucous gull, 1; herring gull, 750; ring-billed gull, 310; Bonaparte's gull, 250; horned owl, 1 (found dead in trap); short-eared owl, 1 (observed at 75 ft range — A.K.); flicker, 1; hairy woodpecker, 12; downy woodpecker, 18; horned lark (prairie), 2; blue jay, 2; Am. crow, 95; black-capped chickadee, 65; white-breasted nuthatch, 16; red-breasted nuthatch, 5; brown creeper, 12; winter wren, 7; robin, 3; hermit thrush, 1 (observed at 10 ft. — J. C., E. A., M. B.); golden-crowned kinglet, 24; ruby-crowned kinglet, 1 (observed at 5 ft. — C. J., H. M.); cedar waxwing, 325; starling, 308; myrtle warbler, 1 (observed at 150 ft. and call note clearly noted; 2 seen 10 days before census — C. J., H. M.); English sparrow, 353; eastern meadowlark, 1 (W. E.); cardinal, 6; common redpoll, 80; Am. goldfinch, 1; slate-colored junco, 60; tree sparrow, 90; white-throated sparrow, 6 (same flock present all fall — C. J., H. M.); swamp sparrow, 1; song sparrow. 14. **Total,** 59 species; approximately 3885 individuals. — Elisha Atkins, James Barlow, Mary Bartlett, Dirck Benson, Don Bieber, John Chapin, H. Clements, Gertrude Davis, William Edson, Robert Folker, Fred Hall, Reginald Hartwell, Carson Jarvis, Allan Klonick, Howard Miller, Don Nelson, Richard O'Hara, Don Parker, Robert Parker, Lucius Paul, Fred Raetz, Oscar Schaefer, Hugh Schaefer, Ambrose Secker, Elmer Siebert, Don Spitz, Joseph Taylor, Don Wolf (Genesee Ornithological Society).

67. Rockland County, N. Y. (7½-mile radius from New City, including Hudson River from Piermont to Tomkins Cove and inland as far as Suffern (abuts Bear Mt. census area on north and Ridgewood Audubon Society on south); farmland 15%, coniferous woodland 5%, deciduous woodland 25%, river shore 25%, ponds 5%, fresh-water marsh 15%, salt-water marsh 10%. — Dec. 20; dawn to dusk. Fair; temp. 8° to 28° F.; wind N and NE, 1-12 m.p.h.; ground bare; ponds and slow streams mostly frozen except 75% of Rockland Lake. Fourteen observers in 5 parties. Total hours, 34½ (on foot); total miles, 27 (on foot). Mute swan, 1; mallard, 3; black duck, 72; wood duck, 7; canvas-back, 40; scaup duck (sp.), 4; Am. golden-eye, 22; buffle-head, 6; ruddy duck, 30; Am. merganser, 78; red-breasted merganser, 1; red-shouldered hawk, 2; bald eagle, 2; sparrow hawk, 1; Am. coot, 2; great black-backed gull, 1; herring gull, 45; yellow-shafted flicker, 4; hairy woodpecker, 6; downy woodpecker, 38; blue jay, 52; Am. crow, 400; black-capped chickadee, 126; tufted titmouse, 21; white-breasted nuthatch, 25; red-breasted nuthatch, 1; brown creeper, 4; winter wren, 4; eastern bluebird, 5; golden-crowned kinglet, 7; cedar waxwing, 15; starling, 580; myrtle warbler, 85; English sparrow, 131; eastern meadowlark, 12; red-wing, 2; cowbird, 1; cardinal, 4; purple finch, 1; pine siskin, 2; goldfinch, 9; slate-colored junco, 204; tree sparrow, 123; field sparrow, 5; white-throated sparrow, 49; swamp sparrow, 1; song sparrow, 41. **Total,** 47 species; 2275 individuals. — Mr. and Mrs. W. G. Irving, Robt. Burkhart, H. S. Kelsey, J. M. Price, R. F. Deed, Eugene Brown, George Helmke, Bertha Miller, J. C. Orth, Margaret Sucsy, Mrs. H. V. Meyer, Mrs. S. W. Collins, Evelyn McGregor (Rockland Audubon Society).

68. Saranac Lake, N. Y. (grounds of Trudeau Sanatorium, along Saranac River to Bloomingdale, Franklin Falls Road and adjacent woodland to Moose Pond, Bloomingdale through Forest Home to Peck's Corners; open farmland 20%, town suburbs 10%, river borders 20%, mixed deciduous and coniferous woodland 50%). — Dec. 21; 7:30 a.m. to 4:30 p.m. Cloudy, light snow; temp. 18° to 22° F.; wind SW, 1-7 m.p.h.; 6-in. soft snow on ground; lakes and ponds frozen but river open in many places. Observers together. Total hours, 8; total miles, 12. Ruffed grouse, 1; hairy woodpecker, 1; downy woodpecker, 2; blue jay, 1; Am. crow, 6; black-capped chickadee, 6 (the scarcity of this species this winter has been commented on by many local feeding stations operators); white-breasted nuthatch, 2; starling, 8; Am. goldfinch, 1; English sparrow, 12; cowbird, 1 (at feeding station for several weeks); slate-colored junco, 2; tree sparrow, 18; white-throated sparrow, 1; song sparrow, 1. **Total,** 14 species; 63 individuals. — G. M. Meade, C. G. Merkel.

69. Schenectady, N. Y. (same overall area as in 1929 and subsequent counts, but differing from 1946 area by reinclusion of Central Park section; area centered about 5 miles due south of Schenec-

tady; urban and suburban 5%, farmyards 5%, open farmland 40%, light deciduous woods 20%; mixed deciduous and evergreen woods 10%, brush hillsides and ravines 10%, cattail marshes 10%). — Dec. 21; 7:15 a.m. to 4:30 p.m. Overcast, hazy, intermittent light sleet changing to snow, clearing at 1:30 p.m., sunny rest of day; temp. 20° at start, 26° at noon, 31° at return; wind WNW, calm in a.m., up to 20 m.p.h. after sky cleared; ground partially covered with 1-2-in. old snow; minimum of open water. Forty-three observers in 12 parties, plus urban and suburban feeding-station records. Total hours, 76 (57 on foot, 19 by car); total miles, 301 (76 on foot, 225 by car). Black duck, 7; sharp-shinned hawk, 1; Cooper's hawk, 2; red-tailed hawk, 6; Am. rough-legged hawk, 1; marsh hawk, 1; sparrow hawk, 7; ruffed grouse, 4; ring-necked pheasant, 22; herring gull, 1; ring-billed gull, 1; mourning dove, 1; horned owl, 1; barred owl, 1; belted kingfisher, 2; pileated woodpecker, 3; yellow-bellied sapsucker, 1 (seen at feeder, Mrs. L. S. D.); hairy woodpecker, 19; downy woodpecker, 38; blue jay, 93; Am. crow, 1342 (incl. 1000 est. at roost); black-capped chickadee, 296; white-breasted nuthatch, 35; red-breasted nuthatch, 2; brown creeper, 20; robin, 2; golden-crowned kinglet, 10; ruby-crowned kinglet, 2 (S. P.); northern shrike, 1; starling, 3969 (incl. 2500 est. at city roosts); myrtle warbler, 1 (at feeder, Mrs. W. E. B.); English sparrow, 531; red-wing, 1; purple finch, 2; Am. goldfinch, 8; slate-colored junco, 89; tree sparrow, 578; song sparrow, 28. **Total,** 38 species; approximately 7129 individuals. (Female ruby-crowned kinglet in yard Dec. 20. — E. H.; robin Dec. 19 — A. H.). — Alice Abel, James J. Anderson, Mrs. C. C. Bailey, Mr. and Mrs. G. H. Bainbridge, Pauline E. Baker, Guy Bartlett, Mrs. Laura Beck, Myrtice A. Blatchley, Mrs. W. E. Blowney, Mrs. R. M. Brockway, Mrs. W. L. Butler, Mary Christie, Mrs. L. S. Davenport, Agnes Eddy, Frank Freese, Sr., John W. Freese, Chester Griffith, Mr. and Mrs. Esly Hallenbeck, Alice Holmes, Mr. and Mrs. H. G. Kelley, Marilyn Kelley, Viola Mabb, Lois Maxson, Gloria Meader, B. D. Miller, P. S. Miller, David Pelton, Stephanie Podrazik, Mrs. M. E. Rexford, Dorothy Sawyer, Minnie B. Scotland, Benton Seguin, Vincent J. Schaefer, Rudolph Stone, Nelle G. Van Vorst, Mr. and Mrs. John L. Voght, Franklin H. West, Leon A. Wiard, G. M. Andrews (Schenectady Bird Club).

70. Staten Island, N. Y. — Dec. 21; 7:30 a.m. to 4:30 p.m. Slightly overcast most of day; temp. 20° to 28°; wind W, 15 m.p.h.; ground bare. Ten observers in 4 parties. Total hours, 9; total miles, 50 (est.). Common loon, 2 (plus 1 dead); Holboell's grebe, 1; horned grebe, 10; pied-billed grebe, 1; great blue heron, 1; black-crowned night heron 1; mallard, 1; black duck, 57; scaup duck (sp.), 15,000; Am. golden-eye, 123; buffle-head, 37; old-squaw, 38; white-winged scoter, 12; hooded merganser, 1; sharp-shinned hawk, 1; red-tailed hawk, 1; rough-legged hawk, 2; marsh hawk, 4; sparrow hawk, 6; ring-necked pheasant, 9; clapper rail, 1; killdeer, 12; Wilson's snipe, 1; great black-backed gull, 19; herring gull, 13,000; ring-billed gull, 1; laughing gull, 45; Bonaparte's gull, 500; mourning dove, 3; flicker, 7; downy woodpecker, 7; horned lark (prairie), 24; blue jay, 12; Am. crow, 109; black-capped chickadee, 12; white-breasted nuthatch, 5; brown creeper, 5; robin, 10; hermit thrush, 2; starling, 5000; myrtle warbler, 37; English sparrow, 124; eastern meadowlark, 22; rusty blackbird, 2; cardinal, 23; eastern towhee, 3; slate-colored junco, 68; tree sparrow, 160; field sparrow, 1; white-throated sparrow, 105; fox sparrow, 3; swamp sparrow, 4; song sparrow, 54; snow bunting, 7. **Total,** 54 species; 34,696 individuals. — Paul Connor, Lee A. Ellison, Curt Henning, Henry Flamm, Dr. Joseph Kovacs, Charles Pearson, Casimir Redjives, Mr. and Mrs. Bert Schaughency, Mrs. Miriam Stryker.

71. Watertown, N. Y. (circle not exceeding a 7-mile radius with Public Square the center; 5 feeding stations, wooded areas 25%, evergreen swamps 25%, streets 8%, country lanes 15%, park and farm land 12%, river banks 15%). — Dec. 28. Overcast skies; fine misty snow; temp. 18° at start, 16° at finish; wind 30 m.p.h.; soft snow 6-in. deep. Twenty-three observers, 5 at feeding stations, rest in 16 parties. Total party hours, 35 (on foot); total party miles 39½ on foot or skiis; no car mileage counted). Mallard, 3; ruffed grouse, 3; ring-necked pheasant, 8; snowy owl, 1; hairy woodpecker, 1; downy woodpecker, 6; blue jay, 11; black-capped chickadee, 32; white-breasted nuthatch, 10; northern shrike, 1; starling, 231; English sparrow, 601; snow bunting, 104. **Total,** 13 species; 1003 individuals. (Reported within a week: herring gull, 2; screech owl, 1; golden-crowned kinglet, 5.) — Mr. and Mrs. Paul Biggers, J. A. Common, F. Clinch, Wm. Engler, L. Fitsimmons, Lucille Grant, Frances Hart, Mr. and Mrs. L. Kenfield, Ruth Martell, Mr. and Mrs. B. McCord, Mrs. A. Neuman, Erma Schell, Dr. S. Simpson, Mrs. J. Stone, M. Walrath, Mr. and Mrs. R. Taylor, H. Wiley, Faith Common Wodell, Minna A. Common.

72. Watkins Glen, N. Y. (radius of about 2 miles from my home in Watkins Glen in all directions on foot, including a cemetery, some of Watkins Glen State Park, open country along road, cattail marsh and lake). — Dec. 28; 7:45 a.m. to 4 p.m. Strong wind and snow squalls all day; sun came out warm by spells; lake very rough; temp. 26° to 29°. Black duck, 1 (injured); marsh hawk, 1; ring-necked pheasant, 1; herring gull, 500 (est.); downy woodpecker, 3; blue jay, 2; Am. crow, 50 (est.); black-capped chickadee, 14; white-breasted nuthatch, 3; golden-crowned kinglet, 1; starling, 3; English sparrow, 63; slate-colored junco, 2; tree sparrow, 5; song sparrow, 1. **Total,** 15 species; ap-

proximately 650 individuals. (Seen on Dec. 22: common loon, 2; horned grebe, 5; hairy woodpecker, 1; on Dec. 27; a ruby-crowned kinglet came to my kitchen window). — Louise Helfer.

73. Boonton, N. J. (an area not exceeding a 15-mile diameter with Troy Hills the center; deciduous woodland 30%, open marsh 20%, wooded swamp 30%, pasture and farmland 15%, miscellaneous 15%). — Dec. 21; 6 a.m. to 6 p.m. Clear, cumulus clouds, visibility good; temp. 17° to 40°; wind W, maximum velocity 22 m.p.h.; reservoir open, lakes and ponds frozen, marshes partially open, water levels normal; ground bare. — Twenty-one observers in 8 parties. Total hours, 75 (57 on foot, 13 by car, 5 by boat); total miles, 170 (60 on foot, 100 by car, 10 by boat). Great blue heron, 3; mallard, 38; black duck, 573; baldpate, 79; green-winged teal, 4; wood duck, 1; ring-necked duck, 11; scaup duck (including greater and lesser), 9; golden-eye, 12; buffle-head, 15; ruddy duck, 23; hooded merganser, 11; Am. merganser, 21; Cooper's hawk, 1; red-tailed hawk, 6; red-shouldered hawk, 1; bald eagle, 1; marsh hawk, 5; sparrow hawk, 13; ruffed grouse, 4; ring-necked pheasant, 2; coot, 40; killdeer, 1; herring gull, 9; screech owl, 4; horned owl, 2; barred owl, 2; long-eared owl, 1; belted kingfisher, 3; yellow-shafted flicker, 4; hairy woodpecker, 18; downy woodpecker, 52; horned lark, 53; blue jay, 83; Am. crow, 219; black-capped chickadee, 198; tufted titmouse, 31; white-breasted nuthatch, 35; brown creeper, 22; winter wren, 6; long-billed marsh wren, 11 (unusually high); robin, 1; eastern bluebird, 7; golden-crowned kinglet, 24; Am. pipit, 10; starling, 1025; palm warbler (yellow), 2 (positive identification — H. M. Van Deusen); English sparrow, 414; eastern meadowlark, 5; red-wing, 71; rusty blackbird, 137; cowbird, 150; cardinal, 23; purple finch, 1; Am. goldfinch, 31; eastern towhee, 1; slate-colored junco, 120; tree sparrow, 368; field sparrow, 12; white-throated sparrow, 60; fox sparrow, 1; swamp sparrow, 11; song sparrow, 85. **Total,** 64 species; 4186 individuals. — C. D. Brown, R. Burkhart, W. Downin, J. L. Edwards, A. E. Eynon, R. Frohling, R. Hagar, C. Hetzel, D. Kunkle, J. Mann, R. Murray, N. Niosi, J. Northwood, R. S. Thorsell, H. M. Van Deusen, F. P. Wolfarth, Mr. and Mrs. T. D. Carter, D. Davey, R. Deacon, L. Winters (members and guests, Urner Ornithological Club).

74. Cape May, N. J. (7½-mile radius from Rio Grande, Cape May County; salt marsh 15%, woodland 15%, cultivated land 15%, sand beach 5%, ocean and bay 50%). — Dec. 28. Clear; temp. 30° at start, 33° at return; wind SW, 25-35 m.p.h.; 3-in. of snow; fresh water ponds frozen. Sixty-three observers in 10 parties. Total hours, 480 (335 on foot, 145 by car); total miles, 1360 (600 on foot, 760 by car). Common loon, 22; red-throated loon, 113; Holboell's grebe, 3; horned grebe, 21; double-crested cormorant, 2; great blue heron, 44; little blue heron, 15 (14 imm., 1 adult; the first record of an adult on this count; 2 adults have been seen in area for several weeks); black-crowned night heron, 48; Am. bittern, 3; Canada goose, 25; brant, 200; mallard, 18; black duck, 1512; pintail, 14; green-winged teal, 48; baldpate, 72; wood duck, 1 (J. Jacobs *et al.*); greater scaup duck, 73; lesser scaup duck, 6; Am. golden-eye, 39; buffle-head, 99; old-squaw, 117; white-winged scoter, 30; surf scoter, 1; Am. scoter, 24; Am. merganser, 11; red-breasted merganser, 147; turkey vulture, 434; sharp-shinned hawk, 8; Cooper's hawk, 7; red-tailed hawk, 10; red-shouldered hawk, 3; Am. rough-legged hawk, 3; bald eagle, 11; marsh hawk, 110; duck hawk, 1; sparrow hawk, 20; bob-white, 4; ring-necked pheasant, 1; killdeer, 79; black-bellied plover, 39; woodcock, 4; greater yellow-legs, 4; lesser yellow-legs, 1 (J. Potter *et al.*); purple sandpiper, 6; least sandpiper, 6; red-backed sandpiper, 3771; semipalmated sandpiper, 35; western sandpiper, 60; sanderling, 290; great black-backed gull, 52; herring gull, 1628; ring-billed gull, 217; laughing gull, 4 (one recorded by each of 4 different parties); Bonaparte's gull, 246; mourning dove, 131; horned owl, 2; barred owl, 2; short-eared owl, 1; belted kingfisher, 2; yellow-shafted flicker, 55; red-bellied woodpecker, 1 (J. Cadbury *et al.*); hairy woodpecker, 3; downy woodpecker, 32; eastern phoebe, 3 (2 recorded by 1 party, 1 by another party); horned lark, 1092; tree swallow, 145; blue jay, 12; Am. crow, 5209; fish crow, 11; Carolina chickadee, 103; tufted titmouse, 46; white-breasted nuthatch, 2; brown creeper, 4; winter wren, 5; Carolina wren, 26; short-billed marsh wren, 1; mockingbird, 4; catbird, 3; brown thrasher, 3; robin, 124; hermit thrush, 27; eastern bluebird, 42; ruby-crowned kinglet, 10; Am. pipit, 290; cedar waxwing, 17; starling, 3223; myrtle warbler, 9653; palm warbler (western), 3; English sparrow, 683; eastern meadowlark, 608; red-wing, 1346; rusty blackbird, 17; purple grackle, 3527; cowbird, 4740 (very high count for this area); cardinal, 101; Am. goldfinch, 99; eastern towhee, 6; Ipswich sparrow, 7; Savannah sparrow, 158; sharp-tailed sparrow, 27; seaside sparrow, 5; vesper sparrow, 40; slate-colored junco, 496; tree sparrow, 170; chipping sparrow, 2; field sparrow, 93; white-throated sparrow, 494; fox sparrow, 11; swamp sparrow, 70; song sparrow, 379; snow bunting, 3. **Total,** 112 species; approximately 43,131 individuals. — P. Street, W. Lukens, N. Mc Donald, H. Brown, H. LeCompte, J. Wilson, D. Whitten, D. Twining, E. Choate, E. Finkel, S. Schiff, A. Zaid, C. White, J. Jacobs, W. Middleton, L. Corn, E. Manners, R. Thomas, J. Wright, B. Bennett, H. Ekdahl, O. Joyce, D. Batezel, R. Haines, E. Ward, F. McLaughlin, G. Regensberg, J. H. Austin, J. B. Austin, E. Weyl, C. Ross, A. Frost, J. Cadbury, B. Cadbury, W. Corson, J. McNeil, B. Satterthwaite, J. Potter, W. Marshall, E. Marshall, E. Archer, R. Miller, W. Wright, L. Norbury, D. Norbury, W. Radcliffe, M. A. Linton,

C. Reagan, A. Nicholson, Jr., E. Wildman, F. Stokes, R. Darlington, Q. Kramer, W. Reynolds, R. Sehl, P. Martin, W. Heed, T. Morgan, E. Reimann, R. Newman, M. Mc Cutcheon, W. Sheldon, D. Coman (Delaware Valley Ornithological Club).

75. Great Swamp — Watchung Ridges, N. J. (7½-mile radius from New Providence; dry deciduous woods 50%, fields 25%, wet deciduous woods 10%, suburban areas 10%, evergreen woods 5%). — Dec. 27; 7 a.m. to 5 p.m. Clear; temp. 29° to 35° F.; wind N, 10-15 m.p.h.; ground covered with 26-in. snow (an all-time record for the area for a single snowfall); ponds and streams frozen. Fifteen observers in 10 parties. Total party-hours, 90; total party-miles, 25 (on foot). Mallard, 23; black duck, 38; sharp-shinned hawk, 1; Cooper's hawk, 1; red-shouldered hawk, 1; bald eagle, 1; osprey, 1 (seen at a distance of ¼ mile with 7X50 binoculars by E. C., and directly overhead by R. S.); duck hawk, 1; sparrow hawk, 8; bob-white, 1; ring-necked pheasant, 1; killdeer, 1; mourning dove, 7; barn owl, 1; yellow-shafted flicker, 1; yellow-bellied sapsucker, 2; hairy woodpecker, 11; downy woodpecker, 58; horned lark (northern), 1; blue jay, 239; Am. crow, 398; black-capped chickadee, 189; tufted titmouse, 105; white-breasted nuthatch, 89; brown creeper, 7; robin, 1; eastern bluebird, 41; golden-crowned kinglet, 9; cedar waxwing, 2; starling, 284; myrtle warbler, 177; English sparrow, 578; cowbird, 1; cardinal, 55; purple finch, 1; Am. goldfinch, 8; eastern towhee, 3; slate-colored junco, 526; tree sparrow, 244; chipping sparrow, 1; field sparrow, 13; white-throated sparrow, 169; fox sparrow, 15; song sparrow, 67. **Total,** 44 species; approximately 3381 individuals. — Gilbert Cant, David Fables, Lloyd Sandford, Edwin Stearns, Glen Woolfenden, E. L. Chalif, Frederic R. Colie, J. d' Northwood, R. Schulman, Mrs. C. B. Stoner, Mrs. Cisne, James B. Hawley, Jeannette Middlebrook, Mrs. Miller, Herbert Rebell (Urner Ornithological Club, New Jersey Audubon Society, Summit Nature Club); also many other members of the Chatham and Summit Nature Clubs who made day-long observations at their feeding stations.

76. Lakehurst, N. J. (Point Pleasant to Toms River, Lakehurst and Lakewood; pine woods 50%, deciduous woods 20%, cultivated land 10%, cedar swamps 5%, sand beach 5%, salt marsh 5%, towns 5%). — Dec. 20; 7 a.m. to 5 p.m. Clear; temp. 15° to 40° F.; wind N, 10 m.p.h.; ground bare; thin ice on ponds and lakes, Barnegat Bay open. Ten observers in 3 parties. Total party-hours, 25; total party-miles, 150 (130 by car, 20 on foot). Common loon, 7; red-throated loon, 3; gannet, 4; great blue heron, 18; Canada goose, 600 (est.) mallard, 16; black duck, 328; European widgeon, 1; baldpate, 71; green-winged teal, 2; shoveller, 2; redhead, 4; greater scaup duck, 10; lesser scaup duck, 3; Am. golden-eye, 14; buffle-head, 14; old-squaw, 3; white-winged scoter, 54; ruddy duck, 88; hooded merganser, 2; Am. merganser, 9; red-breasted merganser, 6; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 1; marsh hawk, 1; sparrow hawk, 2; ring-necked pheasant, 1; Am. coot, 187; killdeer, 3; sanderling, 27; great black-backed gull, 282; herring gull, 1100 (est.); ring-billed gull, 4; Bonaparte's gull, 56; belted kingfisher, 4; yellow-shafted flicker, 1; hairy woodpecker, 1; downy woodpecker, 6; blue jay, 13; Am. crow, 38; Carolina chickadee, 54; tufted titmouse, 9; white-breasted nuthatch, 13; brown creeper, 7; catbird, 1 (H. B., I. B.); robin, 107; hermit thrush, 6; eastern bluebird, 22; golden-crowned kinglet, 53; ruby-crowned kinglet, 1 (D. F.); starling, 1170 (est.); myrtle warbler, 347; yellow palm warbler, 2 (H. B., I. B.); English sparrow, 40; red-wing, 33; cardinal, 9; pine siskin, 1; Am. goldfinch, 88; Ipswich sparrow, 1; Savannah sparrow, 1; sharp-tailed sparrow, 1; slate-colored junco, 115; tree sparrow, 202; field sparrow, 2; white-throated sparrow, 109; fox sparrow, 4; swamp sparrow, 1; song sparrow, 21. **Total,** 69 species; approximately 5408 individuals. — Henry Bennett, Irving Black, Roland Bonorden, David Fables, John Gee, Richard Johnson, Don Maxwell, Carol Stevens, L. B. and Glen Woolfenden (members and guests, Urner Ornithological Club).

77. Long Branch, N. J. (Oceanport to Wreck Pond; residential areas 10%, beach-front 20%, bushy fields 15%, bays and ponds 20%, farm lands 15%, woods 20%). — Dec. 21; 5:30 a.m. to 4:30 p.m. Partly cloudy; temp. 26° at start, 38° at return; wind SW, 5-15 m.p.h.; no snow; ponds partly frozen. Nine observers in 4 parties. Total hours afield, 40 (25 on foot); total miles, 200 (160 by car, 40 on foot). Common loon, 10; red-throated loon, 3; horned grebe, 4; gannet, 2; great blue heron, 3; mute swan, 2 (regular year around semi-domestic swans not counted); Canada goose, 9; mallard, 135; black duck, 712; baldpate, 134; pintail, 2; green-winged teal, 5; wood duck, 1; redhead, 3; ring-necked duck, 7; canvas-back, 9; scaup duck, 2000 (both species identified); Am. golden-eye, 106; buffle-head, 14; Am. scoter, 1; ruddy duck, 46; hooded merganser, 3; Am. merganser, 25; red-breasted merganser, 114; sharp-shinned hawk, 2; Cooper's hawk, 1; red-tailed hawk, 3; marsh hawk, 1; sparrow hawk, 14; ruffed grouse, 1; bob-white, 1; ring-necked pheasant, 1; Am. coot, 100; killdeer, 10; great black-backed gull, 450; herring gull, 5500; ring-billed gull, 20; Bonaparte's gull, 160; mourning dove, 70; screech owl, 2 (1 freshly killed); horned owl, 1; belted kingfisher, 5; yellow-shafted flicker, 4; hairy woodpecker, 2; downy woodpecker, 12; horned lark, 6; blue jay, 13; Am. crow, 155; black-capped chickadee, 1; Carolina chickadee, 75; tufted titmouse, 25; white-breasted nuthatch, 6; brown creeper, 3; winter wren, 2; Carolina wren, 17 (now at a high peak in numbers); catbird, 1; robin, 86; hermit thrush, 1; eastern bluebird, 31; golden-crowned kinglet, 1;

cedar waxwing, 29; starling, 3200; myrtle warbler, 500; English sparrow, 70; eastern meadowlark, 14; red-wing, 109; purple grackle, 1500; cowbird, 80; cardinal, 20; goldfinch, 20; slate-colored junco, 120; tree sparrow, 100; field sparrow, 15; white-throated sparrow, 200; song sparrow, 20; snow bunting, 2. **Total,** 77 species; approximately 16,132 individuals. — Henry Bennett, Irving H. Black, Benjamin Einhorn, John Gorham, Kenneth Gosmer, Mrs. Ethel Woolfenden, Glenn Woolfenden, Howard Seeley, George M. Seeley (members and guests, Urner Ornithological Club).

78. Moorestown, Maple Shade and Riverton, N. J. (Delair to Delanco along Delaware, Maple Shade, Moorestown, Mt. Laurel, Hartford and Bridgeboro; open farmland 50%, suburban gardens 15%, river-front 13%, deciduous woods 13%, evergreen woods 3%, wet brushy meadows 6%). — Dec. 21; dawn to dusk. Clear; temp. 22° to 42° F.; wind N, 0-10 m.p.h.; ground bare; only still water frozen. Twenty-three observers in 10 parties. Total hours, 33½ (20½ on foot, 5 in car, 8 at feeding stations); total miles, 71 (53 in car, 18 on foot). Great blue heron, 3; black duck, 729; pintail, 13; Am. goldeneye, 4; Am. merganser, 34; turkey vulture, 7; Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 1; marsh hawk, 1; sparrow hawk, 12; killdeer, 27; herring gull, 366; Bonaparte's gull, 13; mourning dove, 2; screech owl, 1; horned owl, 1; yellow-shafted flicker, 5; hairy woodpecker, 2; downy woodpecker, 11; blue jay, 19; Am. crow, 716; fish crow, 1; chickadee, 22 (most Carolina, perhaps a few black-capped); tufted titmouse, 13; white-breasted nuthatch, 2; brown creeper, 3; winter wren, 1; Carolina wren, 1; robin, 3; hermit thrush, 1; eastern bluebird, 5; golden-crowned kinglet, 6; ruby-crowned kinglet, 1; starling, 663; myrtle warbler, 6; English sparrow, 124; eastern meadowlark, 83; cardinal, 38; goldfinch, 17; vesper sparrow, 2; slate-colored junco, 290; tree sparrow, 66; white-throated sparrow, 179; song sparrow, 68. **Total,** 45 species; 3565 individuals. — Sarah Aldridge, Bessie and W. L. Cleaver, Helen C. Collins, Samuel and Clarissa Cooper, Charles and William Bacon Evans, Elizabeth Gillingham, Wendell Hinkey, P. G. Howard, P. E. Howard, Jr., Helena Jones, Elizabeth Lippincott, Percy Lovell, James and Helen Moore, A. Nicholson, Jr., C. L. Reagan, J. F. Salmon, Jr., James L. Wilson, Katharine Wilson, George D. Wood.

79. Mt. Holly, N. J. (vicinity of Rancocas, Hainesport, Lumberton, Burlington, also along the Rancocas Creek, and Delaware River). — Dec. 21; 7:30 a.m. to 4:30 p.m. Clear; temp. 24° to 33°; wind light NW. Total miles, 41 (35 by car, 6 on foot). Total hours, 9. Black duck, 250; pintail, 500; Am. merganser, 12; turkey vulture, 10; Cooper's hawk, 1; red-tailed hawk, 2; sparrow hawk, 4; killdeer, 2; herring gull, 10; ring-billed gull, 2; mourning dove, 13; belted kingfisher, 2; yellow-shafted flicker, 2; hairy woodpecker, 1; downy woodpecker, 4; eastern phoebe, 1; blue jay, 3; Am. crow, 200; black-capped chickadee, 8; tufted titmouse, 6; white-breasted nuthatch, 2; brown creeper, 1; robin, 6; eastern bluebird, 12; golden-crowned kinglet, 3; starling, 150; myrtle warbler, 6; English sparrow, 13; eastern meadowlark, 1; cardinal, 4; slate-colored junco, 15; tree sparrow, 3; field sparrow, 2; white-throated sparrow, 12; song sparrow, 20. **Total,** 35 species; 1283 individuals. — Nelson D. W. Pumyea.

[Another count from the same area was made on Dec. 28 by Doris H. Sprow, and J. Russell Sprow, who recorded the following additional species in 5¾ hours of observation: mallard, 2; red-shouldered hawk, 1; horned lark, 65; winter wren, 1; hermit thrush, 3; red-wing, 7; Am. goldfinch, 2. Total, 38 species; 862 individuals. — Ed.]

80. Princeton, N. J. (within a 9¼-mile diameter; villages, estates, farms, lowland and upland deciduous woods, and red-cedar groves). — Dec. 21; before dawn till after dark. Partly cloudy; temp. 26° to 42°; calm to light NW wind; ground bare; lake, ponds and marshes frozen, streams more or less open. Seventeen observers in 8 parties. Total hours, 52¾ (50 on foot, 2¾ by car); total miles, 65 (47 on foot, 18 by car). Canada goose, 58; mallard, 175; black duck, 40; baldpate, 2; sharp-shinned hawk, 3; Cooper's hawk, 3; red-tailed hawk, 2; red-shouldered hawk, 2; marsh hawk, 2; duck hawk, 1; sparrow hawk, 8; ring-necked pheasant, 1; herring gull, 3; mourning dove, 75; screech owl, 1; belted kingfisher, 5; yellow-shafted flicker, 20; yellow-bellied sapsucker, 4; hairy woodpecker, 10; downy woodpecker, 112; horned lark, 2; blue jay, 47; Am. crow, 743; fish crow, 1; chickadee, 42 (at least 8 black-capped, 3 Carolina); tufted titmouse, 92; white-breasted nuthatch, 37; brown creeper, 18; winter wren, 6; Carolina wren, 3; robin, 3; hermit thrush, 2; eastern bluebird, 83; golden-crowned kinglet, 18; ruby-crowned kinglet, 2; cedar waxwing, 51; starling, 542; myrtle warbler, 262; English sparrow, 239; eastern meadowlark, 27; cardinal, 68; Am. goldfinch, 14; vesper sparrow, 1 (well seen — J. K. W.); slate-colored junco, 110; tree sparrow, 156; field sparrow, 28; white-throated sparrow, 287; swamp sparrow, 1; song sparrow, 55. **Total,** 50 species; approximately 3467 individuals. (Seen in area during period: turkey vulture, 2; killdeer, 2; phoebe, 1 (very well seen at feeding station — C. H. R.); horned lark, 100; mockingbird, 1; rusty blackbird, flock of 32; fox sparrow, 1.) Continued great increase in wintering myrtle warblers is noteworthy. — E. D. Bloor, Jr., D. M. Compton, R. M. Herriott, M. E. Jurjens, J. T. and R. R. Law, D. J. and I. U. Liebermann, J. K. Meritt, Peter Mott, B. S. Ridgely, C. H., C. R. and W. S. Rogers, A. L. Shinn, Thomas Smyth, J. K. Wallis.

81. Raritan Estuary, N. J. (same area as in 9 previous years; salt meadows 15%, fresh-water swamp 15%, swampy woods 20%, deciduous woodland 10%, pine woodland 5%, open farmland 10%, suburbs 25%). — Dec. 23; 5:15 a.m. to 4:15 p.m. Solid overcast; snow flurry before dawn, then rain, becoming heavy at noon; 2 in. of snow beginning at 2:30 p.m.; temp. 31° to 37° F.; wind NE to NW, 5-12 m.p.h.; ground bare at start, partly frozen; still water frozen, streams open. Nine observers in 5 parties. Total hours, 41; total miles, 33 (on foot). Mallard (feral), 13; black duck, 27; lesser scaup duck, 4; Am. golden-eye, 11; buffle-head, 1; Am. merganser, 2; sharp-shinned hawk, 1: Cooper's hawk, 2; red-tailed hawk, 3; Am. rough-legged hawk, 1; marsh hawk, 10; sparrow hawk, 6; bob-white, 9; killdeer, 2; great black-backed gull, 1; herring gull, 290; ring-billed gull, 1; screech owl, 2; barred owl, 1; short-eared owl, 3; yellow-shafted flicker, 6; hairy woodpecker, 5; downy woodpecker, 24; horned lark, 41 (35 northern, 6 prairie); blue jay, 38; Am. crow, 3985 (3500 est. in roost); fish crow, 4; black-capped chickadee, 27; Carolina chickadee, 1; tufted titmouse, 43; white-breasted nuthatch, 15; brown creeper, 7; long-billed marsh wren, 5 (closely studied; first time in this count area — G. C.); robin, 4; hermit thrush, 3; eastern bluebird, 4; golden-crowned kinglet, 6; starling, 56,615 (55,000 est. in roost); myrtle warbler, 186; English sparrow, 267; eastern meadowlark, 2; red-wing, 30,047 (30,000 est. in roost); purple and bronzed grackle (both forms identified), 15,017 (15,000 est. in roost); cowbird, 5001 (5000 est. in roost); cardinal, 32; Am. goldfinch, 2; pine siskin, 1; Savannah sparrow, 10; slate-colored junco, 189; tree sparrow, 277; field sparrow, 5; white-throated sparrow, 50; swamp sparrow, 18; song sparrow, 42. **Total,** 55 species (1 additional subspecies); approximately 112,369 individuals. — C. D. Brown, Gilbert Cant, Daniel Clark, David Fables, John Gee, Charles Hetzel, J. T. S. Hunn, James Kennedy, Richard Thorsell (Urner Ornithological Club and guests).

82. Ridgewood, N. J. (same area as in previous years, from Ramsey and Piermont south to Radburn and east to Hudson River; open fields and farmland 35%, deciduous woodland 30%, hemlock woods 10%, fresh-water streams and marsh 15%, brush 7%, feeding stations 3%). — Dec. 20; 7 a.m. to 4:30 p.m. Clear; temp. 8° to 30° F.; wind 5-15 m.p.h.; fresh-water ponds frozen. Forty-three observers in 17 parties. Total party-hours, 76; total party-miles (on foot), 70. Green heron, 1 [no details — Ed.]; Canada goose, 27; mallard, 20; black duck, 180; baldpate, 2; green-winged teal, 2; Am. golden-eye, 40; buffle-head, 1; old-squaw 1; ruddy duck, 7; Am. merganser, 95; red-breasted merganser, 1; sharp-shinned hawk, 3; Cooper's hawk, 1; red-tailed hawk, 3; red-shouldered hawk, 2; marsh hawk, 2; duck hawk, 1; sparrow hawk, 10; ruffed grouse, 1; ring-necked pheasant, 3; killdeer, 4; great black-backed gull, 5; herring gull, 256; ring-billed gull, 4; mourning dove, 28; horned owl, 3; belted kingfisher, 4; yellow-shafted flicker, 3; pileated woodpecker, 1; yellow-bellied sapsucker, 3; hairy woodpecker, 22; downy woodpecker, 99; horned lark, 1; blue jay, 179; Am. crow, 101; fish crow, 1; black-capped chickadee, 430; tufted titmouse, 137; white-breasted nuthatch, 114; brown creeper, 29; winter wren, 3; Carolina wren, 3; robin, 6; hermit thrush, 4; bluebird, 31; golden-crowned kinglet, 19; ruby-crowned kinglet, 1; cedar waxwing, 4; starling, 1687; myrtle warbler, 134; English sparrow, 609; red-wing, 27; grackle, 6; cowbird, 5; cardinal, 13; purple finch, 11; Am. goldfinch, 188; eastern towhee, 3; Savannah sparrow, 6; vesper sparrow, 1; slate-colored junco, 692; tree sparrow, 608; field sparrow, 47; white-throated sparrow, 543; fox sparrow, 10; swamp sparrow, 9; song sparrow, 212. **Total,** 68 species; 6709 individuals. — Mr. and Mrs. I. J. Adams, Mrs. R. H. Baker, Mr. and Mrs. H. E. Carnes, Mr. and Mrs. J. Y. Dater, Jr., Mrs. F. G. Dunham, Mr. and Mrs. Norman Emig, Mrs. G. B. Fetter, Mrs. L. Fusser, Mrs. R. H. Gaede, Mrs. C. J. Kientzler, Mrs. F. J. McKenna, Mr. and Mrs. C. K. Nichols, Mr. and Mrs. A. E. Runk, Mrs. J. Van Saun, J. L. Brewer, J. M. Brewer, R F. Byrne, P. H. Grosch, Fred Russell, D. B. Vail, Peter Vail, Ernst Mayr, J. Rowe, Carl Wentworth, J. Flecke, E. Flecke, B. Holt, A. Johnson, B. Reyle, R. Russell, R. Smith, G. Sweeny, C. Wentworth, Jr., P. Williams (Ridgewood Audubon Society and Radburn Troop, Boy Scouts).

83. Allentown, Pa. (Lake Muhlenberg [formerly called Cedar Crest Boating Lake], Trexler Memorial Park, 8 miles west to Trexlertown and vicinity; swampland 65%, pine grove 20%, small ponds 5%, deciduous woodlot 10%). — Dec. 21; 7:30 a.m. to 3:30 p.m. Overcast except for short time in p.m.; temp. 30° to 38°; wind N, 5-15 m.p.h. Five observers (in 2 parties part of time). Total hours, 9 (7½ on foot, 1½ by car); total miles, 60 (15 on foot, 45 in car). Mallard, 100; black duck, 92; ring-necked duck, 2; Cooper's hawk, 2; red-tailed hawk, 1; marsh hawk, 1; sparrow hawk, 2; ring-necked pheasant, 7; mourning dove, 12; long-eared owl, 1; belted kingfisher, 1; yellow-shafted flicker, 2; downy woodpecker, 6; blue jay, 3; Am. crow, 30,000 (est.); black-capped chickadee, 3; tufted titmouse, 13; white-breasted nuthatch, 2; winter wren, 4; golden-crowned kinglet, 1; starling, 82; myrtle warbler, 5; English sparrow, 92; eastern meadowlark, 1; cardinal, 5; Am. goldfinch, 1; slate-colored junco, 25; tree sparrow, 31; white-throated sparrow, 13; song sparrow, 10. **Total,** 30 species; about 30,520 individuals. — Ann Petok, Ruth Farr, Earl E. Montgomery, John E. Trainer, Carl E. Montgomery.

84. Boswell (Somerset Co.), Pa. (4 miles north of Jennerstown in woodland along U. S. 219; westward to Laurel Ridge Mt., along R. D. 1 on

Laurel Ridge toward North Fork Dam; deciduous woodland 50%, hemlock and mountain laurel 10%, open field 10%, marshland 15%, grape tangle and larch 15%). — Dec. 25; 9 a.m. to 5 p.m. Fair; temp. 30° to 38° F.; wind S, 2-3 m.p.h.; water frozen, snow 2-3 in. Observers together. Total hours, 7 (on foot); total miles, 5. Sharp-shinned hawk, 1; sparrow hawk, 1; ruffed grouse, 7; ring-necked pheasant, 2; hairy woodpecker, 2; downy woodpecker, 4; crow, 155; black-capped chickadee, 16; tufted titmouse, 1; white-breasted nuthatch, 5; brown creeper, 4; hermit thrush, 1 (reddish tail, viewed at 10 feet by all); golden-crowned kinglet, 2; English sparrow, 18; slate-colored junco, 16; tree sparrow, 26; song sparrow, 6. **Total,** 17 species; about 267 individuals. — John Edrei Lehman, John A. Lehman, Paul S. Lehman, Leland S. Blough.

85. Clairton, Pa. (precipitous slopes of City Park; Peters Creek bottoms and adjacent hillsides to vicinity of Large, thence by circuitous route northward through Jefferson Township, and homeward by Solar Fuel mine; open farmland 20%, town suburbs 35%, deciduous woodlands 45%). — Dec. 25; 10 a.m. to 5 p.m. Clear; partly cloudy late in p.m.; temp. 24° to 36° F.; wind WNW, 8-12 m.p.h.; exposed places bare, elsewhere covered with ½-in. snow; streams partly frozen. Observers together. Total hours, 7 (on foot); total miles, 9 (on foot). Sparrow hawk, 1; screech owl, 1; downy woodpecker, 3; black-capped chickadee, 3; tufted titmouse, 5; Carolina wren, 2; starling, 11; English sparrow, 42; cardinal, 14; slate-colored junco, 32; tree sparrow, 18; song sparrow, 6. **Total,** 12 species; 138 individuals. — Ellis H. Shimp, Robert L. Shimp.

86. Deer Creek (Allegheny Co.), Pa. (Denny's Pond to Carson's, both sides of creek; Allegheny River, Hulton Bridge to upper end of Fourteen Mile island; deciduous woodland 80%, open farmland 15%, marsh 5%). — Dec. 21; 8 a.m. to 2 p.m. Overcast; temp 32° to 45°; wind W, 1-7 m.p.h.; ground bare; river partly covered with skim ice. Fourteen observers in 5 parties most of the time. Total hours, 28; total miles, 23. Black duck, 27; Am. golden-eye, 1 (adult male swimming down river, diving frequently; watched for 20 minutes — C. R. M., Jr., C. H. M.); ring-necked pheasant, 1; hairy woodpecker, 8; downy woodpecker, 23; Am. crow, 2; black-capped chickadee, 29; tufted titmouse, 29; white-breasted nuthatch, 9; brown creeper, 2; winter wren, 1; Carolina wren, 4; golden-crowned kinglet, 16; starling, 201 (partly est.); English sparrow, 14; cardinal, 21; slate-colored junco, 145; tree sparrow, 25; song sparrow, 16. **Total,** 19 species; 574 individuals. — Ray G. Russell, F. S. Bennett, C. R. Manley, J. Reed Longdon, C. S. Taylor, John Sisley, Stanley Rapp, Ted Brown, Bob Armstrong, Gordon Michael, Bob Rapp, Jim Manley, C. R. Manley, Jr. C. H. Manley.

87. Elverson (Chester Co.), Pa. (7½-mile radius from Marsh P. O.; cedar groves and thickets 15%, meadows and swampland 15%, deciduous woods 30%, upland fields 40%). — Dec. 28; 7 a.m. to 3 p.m. Clear; temp. 25° to 30°; wind, 20-30 m.p.h.; marshes and small ponds frozen; 5-in. snow on ground. Three observers in 2 parties. Total hours, 16 (afoot); total miles, 16 (afoot); cars used only for rapid transportation. Turkey vulture, 5; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 1; marsh hawk, 1; sparrow hawk, 4; ring-necked pheasant, 5; Wilson's snipe, 22; mourning dove, 40; horned owl, 1; yellow-shafted flicker, 5; downy woodpecker, 18; horned lark (northern), 50; blue jay, 3; Am. crow, 140; black-capped chickadee, 4; tufted titmouse, 25; white-breasted nuthatch, 6; brown creeper, 2; Carolina wren, 1; eastern bluebird, 26; golden-crowned kinglet, 1; starling, 270; English sparrow, 160; eastern meadowlark, 12; rusty blackbird, 8; cardinal, 9; Am. goldfinch, 17; purple finch, 2; slate-colored junco, 295; tree sparrow, 71; white-crowned sparrow, 1 (W. H.) [no details—Ed.]; white-throated sparrow, 34; song sparrow, 14. **Total,** 35 species; approximately 1257 individuals. — Robert Cook, Warren Houck, Arthur Sigman.

88. Glenolden, Pa. (Delaware River, Glenolden Marshes, Swarthmore, Media and Springfield Reservoir). — Dec. 21; 7 a.m. to 4:30 p.m. Cloudy; temp. 28° at start, 36° at return; wind NW, moderate; ground bare. Eight observers in 3 parties. Total hours afield, 26 (12 by foot, 14 by car); total party-miles, 58 (18 by foot, 40 by car). Common loon, 1; great blue heron, 1; black-crowned night heron, 2; mallard, 47; black duck, 10,000 (est.); baldpate, 8; pintail, 15,000 (est.); blue-winged teal, 1; redhead, 5; ring-necked duck, 1; scaup duck [sp.], 100 (est.); buffle-head, 4; ruddy duck, 78; Am. merganser, 25; red-breasted merganser, 7; turkey vulture, 5; sharp-shinned hawk, 1; Cooper's hawk, 4; red-tailed hawk, 23; red-shouldered hawk, 2; Am. rough-legged hawk, 1; marsh hawk, 5; pigeon hawk, 1 [no details — Ed.]; sparrow hawk, 7; ring-necked pheasant, 2; Am. coot, 10; killdeer, 3; herring gull, 132; ring-billed gull, 32; laughing gull, 2; mourning dove, 25; screech owl, 2; belted kingfisher, 1; yellow-shafted flicker, 2; hairy woodpecker, 6; downy woodpecker, 15; horned lark, 10; blue jay, 33; Am. crow, 800 (est.); fish crow, 12; tufted titmouse, 34; white-breasted nuthatch, 8; brown creeper, 3; winter wren, 5; Carolina wren, 6; robin, 2; hermit thrush, 6; eastern bluebird, 5; golden-crowned kinglet, 7; Am. pipit, 5; cedar waxwing, 29; starling, 650 (est.); English sparrow, 175; eastern meadowlark, 1; red-wing, 19; cardinal, 32; purple finch, 10; Am. goldfinch, 80; eastern towhee, 1; Savannah sparrow, 11; slate-colored junco, 245; tree sparrow, 225; field sparrow, 11; white-throated sparrow, 170; swamp sparrow, 3; song sparrow, 95. **Total,** 66 species; approximately 28,-254 individuals. — John and Mabel Gillespie, John Gillespie, Jr., V. A. Debes, Charles E. Price, Jr., Paul Schwalbe, E. H. Rigby, E. H. Rigby, 3rd.

89. Hollsopple (Somerset Co.), Pa. (same area as last year; open woodland 21%, open farmland 21%, second growth 18%, dense hemlock and laurel thicket 25%, pine woods 10%, marshland 5%). — Dec. 26; 8 a.m. to 4 p.m. Blinding snow all day; temp. 22°; wind S to SE, 15-20 m.p.h., subsiding at times; ground covered with 6-in. snow; entire Quemahoning Reservoir frozen. Six observers in 3 parties. Total hours, 18; total miles, 16 (on foot). Marsh hawk, 1 (white patch on rump seen distinctly — S. G. S., M. K.); ruffed grouse, 2; ring-necked pheasant, 1; hairy woodpecker, 1; downy woodpecker, 4; horned lark (prairie), 3; Am. crow, 5000 (est.); black-capped chickadee, 12 (scarce this year); tufted titmouse, 35 (unusually common); white-breasted nuthatch, 4; brown creeper, 1; golden-crowned kinglet, 5; English sparrow, 3; cardinal, 9; slate-colored junco, 138; tree sparrow, 99; song sparrow, 10. **Total,** 17 species; 5328 individuals. — Dean Shetler, Leonard Shetler, Stanwyn G. Shetler, Marvin Kaufman, John E. Lehman, Rev. John A. Lehman (Johnstown Mennonite School Jr. Ornithologists' Association).

90. Lancaster, Pa. (same as last year except for the Lampeter neighborhood which was not covered; town suburbs 5%, small pond and cattail swamp 5%, farmland 5%, meadow land 10%, open woodland along creeks, small lake and river shore 75%). — Dec. 27; 8:15 a.m. to 4:30 p.m. Cloudy with brief flashes of pale sunlight in a.m., clearing in pm.; temp. 31° at start, 32° at finish; wind NW with intermittent gusts up to 30 m.p.h.; 5-in. snow on ground, streams and river frozen. Nine observers in 6 parties. Total hours, 42; total miles, 95 (71 by car, 24 on foot). Horned grebe, 1; black duck, 201; Am. merganser, 2; turkey vulture, 1; Cooper's hawk, 3; red-tailed hawk, 1; Am. rough-legged hawk, 1; marsh hawk, 1; sparrow hawk, 9; ring-necked pheasant, 45; mourning dove, 5; barn owl, 2; flicker, 12; hairy woodpecker, 1; downy woodpecker, 28; blue jay, 2; Am. crow, 1327; black-capped chickadee, 14; tufted titmouse, 33; white-breasted nuthatch, 5; brown creeper, 10; winter wren, 2; Carolina wren, 3; mockingbird, 1; catbird, 1; hermit thrush, 6; eastern bluebird, 10; golden-crowned kinglet, 9; starling, 682; myrtle warbler, 1; English sparrow, 287; eastern meadowlark, 3; cardinal, 62; Am. goldfinch, 20; eastern towhee, 2; slate-colored junco, 321; tree sparrow, 50; field sparrow, 5; white-crowned sparrow, 1 [no details — Ed.]; white-throated sparrow, 257; fox sparrow, 1; song sparrow, 39. **Total,** 42 species; 3467 individuals. — H. C. Brown, Jr., Sam Dyke, Carl Fasnacht, Mary Grebinger, J. R. Maddox, Ruth Sener, Charles and Louise Tanger, H. R. Woerner (Lancaster County Bird Club).

91. Linesville (Pymatuning Lake), Pa. (edges of Wildlife Sanctuary, Conneaut Lake, south to Hartstown; lake shore 15%, swamp forest 30%, open fields 15%, thickets, 15%, deciduous woods, 20%, town area, 5%). — Dec. 20; 8:20 a.m. to 5:05 p.m. Sunny; temp. 15° to 35°; wind SE, 10 m.p.h.; ground mostly bare but a little snow in woods; lakes and streams almost completely frozen. Observers, together. Total hours, 8 (6 on foot, 2 by car); total miles, 47 (7 on foot, 40 by car). Great blue heron, 1, Canada goose, 500 (est.); mallard, 60; black duck, 50; bald eagle, 1; sparrow hawk, 1; ring-necked pheasant, 1 (plus several tracks); flicker, 1; pileated woodpecker, 2; hairy woodpecker, 2; downy woodpecker, 5; blue jay, 7; Am. crow, 1; black-capped chickadee, 16; white-breasted nuthatch, 2; brown creeper, 1; winter wren, 1; golden-crowned kinglet, 4; starling, 15; English sparrow, 9; cardinal, 8; Am. goldfinch, 3; slate-colored junco, 40; tree sparrow, 193; song sparrow, 2. **Total,** 25 species; approximately 926 individuals. (The geese were keeping a small area in the sanctuary from freezing over and were being fed in a nearby cornfield). — Marion Skaggs, Merit B. Skaggs.

92. Lititz, Pa. (center of Lititz in northern Lancaster County to 7 miles north, Hammer Creek valley area and White Oak Pond; town suburbs 10%, deciduous farm woodlots 30%, pastures 60%). — Dec. 28; 8 a.m. to 3 p.m. Clear; temp. 22° at start, 28° at return; wind NW, 25-38 m.p.h.; ground covered with 3-in. snow; ponds and creeks frozen. Six observers in 3 parties. Total miles, 40 (25 on foot, 15 by car). Turkey vulture, 3; sharp-shinned hawk, 1; red-tailed hawk, 1; marsh hawk, 1; sparrow hawk, 3; ring-necked pheasant, 85; mourning dove, 3; barn owl, 2; screech owl, 1; long-eared owl, 2; short-eared owl, 3; yellow-shafted flicker, 2; downy woodpecker, 21; blue jay, 4; Am. crow, 280; black-capped chickadee, 19; tufted titmouse, 27; white-breasted nuthatch, 26; brown creeper, 3; winter wren, 2; Carolina wren, 2; eastern bluebird, 4; golden-crowned kinglet, 4; ruby-crowned kinglet, 2; cedar waxwing, 2; starling, 810; myrtle warbler, 25; English sparrow, 410; cardinal, 30; Am. goldfinch, 140; slate-colored junco, 360; tree sparrow, 410; white-throated sparrow, 124; song sparrow, 86. **Total,** 34 species; about 2898 individuals. — Barton L. Sharp, Ford Gochenaur, Fred Gochenaur, Donald Garner, Donald Ruhl, Russell Markert (Lititz Bird Club).

93. Philadelphia, Pa. (Pennypack Creek valley; Delaware River to Beth Ayres; riverfront 10%, public parks 30%, suburban area and farmland 20%, deciduous woodland 40%). — Dec. 27; 8 a.m. to 2:30 p.m. Overcast before 10 a.m., clearing afterwards; temp. 32° to 35°; wind NW, average 16 m.p.h.; 6-10-in. snow on ground; walking difficult. Eleven observers in 4 parties. Total hours, 65; total miles, 60 (50 on foot, 10 by car). Mallard, 60 (not all feral); black duck, 300; pintail, 200; Am. merganser, 25; Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 1; sparrow hawk, 3; herring gull, 35; mourning dove, 2; belted kingfisher, 1; hairy woodpecker, 4; downy woodpecker, 14;

blue jay, 2; Am. crow, 80; black-capped chickadee, 5; tufted titmouse, 39; white-breasted nuthatch, 21; brown creeper, 3; winter wren, 1; Carolina wren, 1; robin, 1; hermit thrush, 1; eastern bluebird, 3; golden-crowned kinglet, 5; cedar waxwing, 15; starling, 120; English sparrow, 93; cardinal, 22; Am. goldfinch, 10; slate-colored junco, 41; tree sparrow, 130; field sparrow, 6; white-throated sparrow, 134; song sparrow, 84. **Total,** 35 species; 1465 individuals. — Joseph Ettlinger, William Yoder, George H. Sivel, Louis Reichel, William Reichel, Mrs. John M. Brower, Miss Gertrude Eldridge, William Nixon, George Bates, Gaylord Leroy, J. T. McNeill, Jr. (Pennypack Valley Bird Club).

94. Pittsburgh, Pa. (city suburbs, Frick Park, Riverview Park, Millvale, Mt. Lebanon, Emsworth, Forest Hills; deciduous wooded hillsides 40%, uncultivated fields 40%, lawns 20%). — Dec. 21. Cloudy; temp. 30° to 40°; wind SW, 1-5 m.p.h.; ground bare. Eighty-four observers in 7 parties. Total hours, 31 (on foot); total miles, 34 (on foot). Cooper's hawk, 3; sparrow hawk, 2; ring-necked pheasant, 39; screech owl, 1; pileated woodpecker, 1; hairy woodpecker, 11; downy woodpecker, 52; black-capped chickadee, 53; tufted titmouse, 57; white-breasted nuthatch, 52; brown creeper, 7; winter wren, 3; golden-crowned kinglet, 4; starling, 256; English sparrow, 185; cardinal, 84; Am. goldfinch, 9; eastern towhee, 1; slate-colored junco, 104; tree sparrow, 32; song sparrow, 25. **Total,** 21 species; approximately 981 individuals. — Dorothy and Carl Auerswald, John Mehner, Helen Blair, Margaret Martin, Galen Hess, Graham Netting, J. R. Lehmen, Russell Buehl, Hal Harrison, Fred Kift, Mrs. J. Bruce Patterson, Mrs. Gordon Stewart, Eliz. McClelland, Janet Dickson, Mrs. J. S. Brown, Comly B. Shoemaker, and friends [names of 67 other observers not given — Ed.] (Audubon Society of Western Pennsylvania).

95. Reading, Pa. (circle with center 2 miles to NE of city; deciduous woodland 40%, open farmland 40%, lakes and ponds 10%, streams and river bottoms 10%). — Dec. 28; 8 a.m. to 4:30 p.m. Partly cloudy; temp. 28° at start, 35° at finish; wind NW, 20-25 m.p.h.; 8-in. snow on ground; lakes and ponds frozen. Twenty-four observers in 6 parties. Total hours, 36; total miles, 60. Mallard, 104; black duck, 401; European widgeon, 1; baldpate, 32; pintail, 6; green-winged teal, 12; Am. golden-eye, 1; Am. merganser, 24; sharp-shinned hawk, 3; red-tailed hawk, 3; marsh hawk, 3; sparrow hawk, 6; ruffed grouse, 1; ring-necked pheasant, 64; killdeer, 1; mourning dove, 40; horned owl, 1; belted kingfisher, 3; yellow-shafted flicker, 5; hairy woodpecker, 3; downy woodpecker, 19; horned lark, 125 (northern, 120; prairie, 5); blue jay, 6; Am. crow, 715; black-capped chickadee, 5; tufted titmouse, 15; white-breasted nuthatch, 4; brown creeper, 3; winter wren, 3; robin, 1; eastern bluebird, 1; golden-crowned kinglet, 6; ruby-crowned kinglet, 1; starling, 164; myrtle warbler, 1; English sparrow, 242; eastern meadowlark, 1; cowbird, 31; cardinal, 52; Am. goldfinch, 40; slate-colored junco, 640; tree sparrow, 1641; field sparrow, 9; white-throated sparrow, 162; swamp sparrow, 8; song sparrow, 42. **Total,** 46 species (1 additional subspecies); 4651 individuals. (Seen on Dec. 21: pied-billed grebe, 1; Am. bittern, 1; Cooper's hawk, 1; Am. rough-legged hawk, 1; duck hawk, 1; herring gull, 3; Am. coot, 1; cedar waxwing, 1; towhee, 1.) — Mrs. Richard Doty, Ned Delaney, Mr. and Mrs. Lawrence Dillon, Patricia Dillon, George Hurley, David Berkheimer, J. Stuart Dreibelbis, Earl L. Poole, Ralph Yerger, James Holzman, Edward Hill, Elwood Manning, Paul Jensen, Paul Martin, John Eshelman, Martin Eshelman, John Strauss, Byron Nunemacher, Charles D. Babcock, John Hand, Ira Weigley, David Schaeffer, Thomas Hansen.

96. Richboro (Bucks Co.), Pa. (from Holland, along the Ironworks Creek, around Ironworks Creek Reservoir, again along the creek to lower end of Richboro; also, along Neshaminy Creek and adjacent ground 2 miles northeast of Richboro; open farmland 25%, deciduous woodland 35%, mixed hemlock and deciduous woodland 5%, brush grown fields 30%, cattail marsh 5%). — Dec. 27; 7:30 a.m. to 5:00 p.m. Overcast, with light sunshine during middle of day; temp. 30° to 35° F., wind NE veering to NW, 15-20 m.p.h.; ground covered with 8-10-in. freshly fallen snow; reservoir 99% frozen, creeks 25% frozen. Five observers in 1 party all day, 4 observers in another party part of day. Total hours, 10 (on foot); total miles, 10 (on foot). Mallard, 27; red-tailed hawk, 2; marsh hawk, 2; sparrow hawk, 6; ring-necked pheasant, 9; mourning dove, 26; belted kingfisher, 3; hairy woodpecker, 1; downy woodpecker, 23; horned lark (northern), 35 (yellow line over eye seen distinctly — L. T.); blue jay, 14; Am. crow, 827; black-capped chickadee, 1; tufted titmouse, 22; white-breasted nuthatch, 3; brown creeper, 3; winter wren, 1; starling, 107; English sparrow, 58; eastern meadowlark, 1; cardinal, 13; slate-colored junco, 116; tree sparrow, 74; white-throated sparrow, 39; song sparrow, 64; snow bunting, 20. **Total,** 26 species; 1497 individuals. (Seen in area during period: lesser scaup duck, 6; turkey vulture, 2; screech owl, 1.) — L. Thomas, Elizabeth Thomas, R. Thomas, Pauline Buckingham, E. Traub, D. Jarden, L. McConnell, A. Herzog, Florence Herzog (Neshaminy Valley Nature Club).

97. Scranton, Pa. (from city to point 12 miles northeast; Susquehanna River Valley to Falls, Pa.; open farmland 50%, suburbs 30%, deciduous and evergreen woodlots 20%). — Dec. 28; 9:30 a.m. to dusk. Cloudy; temp. 25° to 30° F.; very windy, 25-38 m.p.h.; ground covered with 4-12-in. snow. Observers together. Total hours, 7½; total miles, 30 (6 on foot, 24 in car). Black duck, 55; hooded merganser, 2; Am. merganser, 14; red-tailed hawk, 1; mourning dove, 8; downy woodpecker, 2; Am.

crow, 4; black-capped chickadee, 2; tufted titmouse, 2; starling, 3; Am. goldfinch, 3; English sparrow, 60; cardinal, 1; slate-colored junco, 55; tree sparrow, 82; song sparrow, 5. **Total,** 16 species; 299 individuals. — Paul Widdall, David Wharton, Ed. Williams.

98. State College, Pa. (town and campus 27%, college farms 13%, pond and stream east of town to Millbrook 10%, suburban fence rows and woodlots 23%, forest land near Shingletown and Pine Grove Mills 27%). — Dec. 22; 8 a.m. to 5 p.m. Clear in a.m., cloudy in p.m.; temp. 16° at start, 36° in p.m.; wind variable in a.m., S in p.m., 1-7 m.p.h.; ground bare; most streams open. Seven observers, all single in a.m., 3 together in p.m. Total hours, 30 (28 on foot, 2 in car); total miles, 32 (23 on foot, 9 in car). Goshawk, 1 (identified by size, much larger than a crow, short, broad wings, and rapid flight — R. D. A.); sharp-shinned hawk, 1; red-shouldered hawk, 1; marsh hawk, 1; ruffed grouse, 1; Wilson's snipe, 1; barn owl, 1; pileated woodpecker, 2; red-headed woodpecker, 1; hairy woodpecker, 2; downy woodpecker, 11; Am. crow, 51; black-capped chickadee, 15; tufted titmouse, 13; white-breasted nuthatch, 12; brown creeper, 3; golden-crowned kinglet, 10; ruby-crowned kinglet, 1; starling, 132; English sparrow, 140; rusty blackbird, 2; cardinal, 2; Am. goldfinch, 34; slate-colored junco, 15; tree sparrow, 20; song sparrow, 2. **Total,** 26 species; 475 individuals. — R. D. Anthony, Mrs. Arthur W. Cowell, David Cowell, Haskell B. Curry, Robert Curry, Mrs. Robert D. Fellows, William S. Clarke, Jr.

99. Warren, Pa. (same area as in 1946; mature deciduous woodland 40%, open farmland and upland fields 30%, town suburbs 10%, river and creek bottomlands 20%). — Dec. 27; 8:05 a.m. to 5:10 p.m. Light snowfall to 10 a.m., cloudy to partly cloudy thereafter; temp. 30° to 33°; wind NW to W, 5-10 m.p.h.; ground covered with 1-in. snow; water open except at one point on Allegheny River. Observers together. Total hours, 8 (on foot); total miles, 12 (on foot). Am. golden-eye, 9; sparrow hawk, 1; belted kingfisher, 2; yellow-shafted flicker, 1; hairy woodpecker, 1; downy woodpecker, 7; black-capped chickadee, 42; white-breasted nuthatch, 6; brown creeper, 4; winter wren, 2; starling, 5; English sparrow, 26; cardinal, 4; slate-colored junco, 27; tree sparrow, 86; song sparrow, 8. **Total,** 16 species; 231 individuals. (Seen in area Dec. 28: Cooper's hawk, 1; ruffed grouse, 1; blue jay, 1.) — Harris E. Johnson, Thomas M. Hampson, William Hill, Jr.

100. West Chester, Pa. (7½-mile radius; open farmland 50%, town suburbs 5%, deciduous woods 25%, mixed evergreen plantings 5%). — Dec. 27; dawn to dusk. Cloudy; temp. 28° to 31°; wind NW, 8-12 m.p.h.; ground covered with 6-in. snow; reservoirs and ponds only slightly frozen around edges. Twenty-nine observers in 13 parties. Total hours, 70½ (58½ on foot, 12 by car); total miles, 204½ (101½ on foot, 103 by car). Great blue heron, 2; mallard, 44; black duck, 16; Am. merganser, 44; turkey vulture, 10; goshawk, 2 (S. and M. Willing, 1; F. Newman, 1); sharp-shinned hawk, 5; Cooper's hawk, 4; red-tailed hawk, 5; red-shouldered hawk, 3; marsh hawk, 1; sparrow hawk, 9; ring-necked pheasant, 11; killdeer, 1; herring gull, 2; ring-billed gull, 2; mourning dove, 52; screech owl, 2; horned owl, 1; belted kingfisher, 4; yellow-shafted flicker, 12; red-bellied woodpecker, 3; yellow-bellied sapsucker, 2; hairy woodpecker, 11; downy woodpecker, 91; horned lark (prairie), 70; blue jay, 68; Am. crow, 1239; black-capped chickadee, 12; Carolina chickadee, 25; tufted titmouse, 128; white-breasted nuthatch, 71; brown creeper, 25; winter wren, 7; Carolina wren, 9; robin, 4; hermit thrush, 4; eastern bluebird, 47; golden-crowned kinglet, 70; ruby-crowned kinglet, 1; cedar waxwing, 7; starling, 692; myrtle warbler, 36; English sparrow, 247; red-wing, 8; cardinal, 82; purple finch, 2; pine siskin, 3; Am. goldfinch, 48; slate-colored junco, 608; tree sparrow, 373; field sparrow, 2; white-crowned sparrow, 1 (Martin — the only previous winter record from this area is of 2 at Glenolden on Dec. 17, 1939, by John A. Gillespie, Jr.); white-throated sparrow, 225; Lincoln's sparrow, 4 (R. B., R. L., and V. Gordon — seen along small stream on a southerly slope with plenty of food and cover; 1 trapped at Jeffersonville on Dec. 18-20, 1932, by Raymond Middleton is the only previous winter record for this area.); swamp sparrow, 5; song sparrow, 142. **Total,** 57 species; 4604 individuals. — Margaret S. Goodwin, Mary Thomas, Francis Newman, Thomas Morgan, Paul Martin, William Heed, Mr. and Mrs. Shippen Willing, Arthur Hoopes, Mrs. Lewis Marshall, Mrs. Isaac G. Roberts, Alice W. Swayne, Violet L. Findlay, Mrs. Laura W. Abbott, Dr. and Mrs. Robert B. Gordon, Robert L. Gordon, Virginia Anne Gordon, Mr. and Mrs. Joseph Cope, Florence E. James, Mr. and Mrs. Frederic W. Swan, Mr. and Mrs. Edward Siddall, Jr., Frederick A. Colwell, William Mink, Gertrude and Helen Rhoads (West Chester Bird Club and friends).

101. Wyncote, Pa. (to Baederwood, Brier-Bush, Trevose, Chestnut Hill; Churchville Reservoir relinquished to another group; deciduous woods 45%, brushy fields 30%, town suburbs 18%, open farmland 7%). — Dec. 21. Partly cloudy; temp. 23° to 38°; wind variable, light; ground bare; ponds frozen firmly. Twenty-five observers, 14 afield in 4 parties, others at 9 sanctuaries and feeding-stations. Total hours afield, 24 (22 afoot, 2 in car); total miles, 52 (37 afoot, 15 by car). Sharp-shinned hawk, 2; Cooper's hawk, 3; broad-winged hawk, 2 (several miles apart; observers, C. H. S. and H. W., satisfied with close views) [no further substantiating details; very doubtful record. — Ed.]; marsh hawk, 1; sparrow hawk, 5; ring-necked pheasant,

16; mourning dove, 39; barn owl, 1; screech owl, 2; long-eared owl, 1; yellow-shafted flicker, 7; yellow-bellied sapsucker, 1; hairy woodpecker, 6; downy woodpecker, 52; blue jay, 28; Am. crow, 446+; black-capped chickadee, 3; tufted titmouse, 72; white-breasted nuthatch, 25 (1 singing); red-breasted nuthatch, 2; brown creeper, 8; winter wren, 1; Carolina wren, 1; robin, 19 (1 flock of 15); hermit thrush, 1; eastern bluebird, 14 (2 flocks); golden-crowned kinglet, 12; cedar waxwing, 21 (1 flock of 17); starling, 570+; myrtle warbler, 36; English sparrow, 207; cardinal, 77; purple finch, 3; pine siskin, 40 (1 flock); Am. goldfinch, 5; slate-colored junco, 476; tree sparrow, 28; field sparrow, 3; white-throated sparrow, 382; song sparrow, 50. **Total,** 40 species; approximately 2668 individuals. (A ruby-crowned kinglet was seen on Dec. 22.) — Mr. and Mrs. John Bartsch, Robert Berry, Mrs. William Custer, Mr. and Mrs. John Dornan, Robert Ellis, Miss L. Fow, Mr. and Mrs. E. S. Griscom, Jay V. Hare, John Holmes, Richard Lord, Fred Mears, Mr. and Mrs. Arnold Moore, E. H. Parry, Mrs. Frank Ramsay, Mrs. Frank Rossiter, Jay Schnell, C. H. Shaffer, Mr. and Mrs. Carl Sievert, Curtis Sooy, Harry Wright (Wyncote Bird Club).

102. York, Pa. (approximately same area as in 4 previous years; fields and countryside from East York adjoining the Lincoln Highway East, and 1 mile north, to Wrightsville, north along the Susquehanna River, 2 miles; open farmland 50%, deciduous farm woodlots 10%, marshy meadow 5%, woodland and fields along river 35%). — Dec. 20; dawn to dusk. Clear; temp. 24° to 34°; wind NW, 1-7 m.p.h.; ground bare but frozen; river edges frozen, much floating ice. Nine observers in 4 parties. Total hours, 18 (16 on foot, 2 in car); total miles, 28 (10 on foot, 18 by car). Mallard, 2; black duck, 500 (est.); Am. golden-eye, 26; bufflehead, 1; Am. merganser, 3; red-breasted merganser, 5; Cooper's hawk, 1; red-tailed hawk, 1; bald eagle, 1; duck hawk, 1; sparrow hawk, 1; ring-necked pheasant, 4; ring-billed gull, 2; herring gull, 1; mourning dove, 3; yellow-shafted flicker, 2; hairy woodpecker, 1; downy woodpecker, 12; horned lark, 18; Am. crow, 4607; fish crow, 5; black-capped chickadee, 9; tufted titmouse, 23; white-breasted nuthatch, 2; brown creeper, 2; winter wren, 2; Carolina wren, 8; hermit thrush, 1; golden-crowned kinglet, 2; starling, 1063; English sparrow, 59; cardinal, 22; Am. goldfinch, 2; slate-colored junco, 22; tree sparrow, 10; white-throated sparrow, 38; song sparrow, 31. **Total,** 37 species; 6493 individuals. (Seen in the area a few days before, after, or both: eastern towhee, mockingbird, ruby-crowned kinglet, blue jay, field sparrow, belted kingfisher, myrtle warbler.) — Anna Reinecker, Sara Ross Smith, Mary E. Neiman, Verna M. Dietz, Mrs. J. T. Yoder, Viola V. Dietz, LaRue Stelens, Ronald Billet, William Stidt (York Country Bird Club).

103. Bombay Hook National Wildlife Refuge (Kent Co.), Del. (15 mile circle from Woodland Beach to Pickering Beach along Delaware Bay; Moore Pond and Lake Como bordering on the west, with the refuge itself as a nucleus). — Dec. 21; 5 a.m. to 5:30 p.m. Clear all day; temp. 30° at start, 33° at return; light SW wind. Thirty-one observers in 10 parties. Total hours, 69 (56 afoot, 4 by boat, 9 by car); total miles, 135 (65 afoot, 16 by boat, 54 by car). Common loon, 1; great blue heron, 4; Am. egret, 1 (observed for past month); black-crowned night heron, 3; Canada goose, 45; brant, 3; snow goose, 4; mallard, 93; black duck, 3152; gadwall, 24; baldpate, 10; pintail, 2; green-winged teal, 117; blue-winged teal, 3 (at close range; small size, blue patch on front of wing, white crescent on face, etc. — E. F. E., E. M.); shoveller, 65; wood duck, 1; redhead, 1; greater scaup duck, 11; lesser scaup duck, 1; buffle-head, 9; old-squaw, 1; Am. scoter, 3; ruddy duck, 18; hooded merganser, 52; red-breasted merganser, 11; Am. merganser, 20; turkey vulture, 476; black vulture, 2 (observed for past month); sharp-shinned hawk, 4; Cooper's hawk, 7; red-tailed hawk, 38; red-shouldered hawk, 5; Am. rough-legged hawk, 9; bald eagle, 9; marsh hawk, 72; duck hawk, 2; sparrow hawk, 79; bob-white, 44; ring-necked pheasant, 8; Am. coot, 14; killdeer, 85; greater yellow-legs, 11; red-backed sandpiper, 8; herring gull, 146; ring-billed gull, 32; Bonaparte's gull, 2; mourning dove, 95; barn owl, 2; horned owl, 9; belted kingfisher, 3; yellow-shafted flicker, 71; red-bellied woodpecker, 19; hairy woodpecker, 6; downy woodpecker, 26; eastern phoebe, 1; horned lark (northern, 230; prairie, 127), 357; blue jay, 18; Am. crow, 4060; fish crow, 65; black-capped chickadee, 5 (J. M. C. *et al.*); Carolina chickadee, 31; tufted titmouse, 32; white-breasted nuthatch, 1; brown creeper, 3; winter wren, 7; Carolina wren, 38; mockingbird, 19; catbird, 1; robin, 16; hermit thrush, 3; eastern bluebird, 38; golden-crowned kinglet, 11; ruby-crowned kinglet, 9 (observed by 4 parties); Am. pipit, 152; cedar waxwing, 6; loggerhead shrike, 3; starling, 1470; myrtle warbler, 369; yellow-throat, 1 (J. M. C. *et al.*); English sparrow, 295; eastern meadowlark, 319; red-wing, 3472; rusty blackbird, 75; purple grackle, 80; cowbird, 530; cardinal, 80; Am. goldfinch, 89; eastern towhee, 8; Ipswich sparrow, 1 (E. K., Q. K.); Savannah sparrow, 32; sharp-tailed sparrow, 1; vesper sparrow, 3; slate-colored junco, 80; tree sparrow, 383; chipping sparrow, 1 (J. M. C. *et al.*); field sparrow, 22; white-throated sparrow, 290; swamp sparrow, 43; song sparrow, 147. **Total,** 99 species (1 additional subspecies); approximately 17,606 individuals. — Jack Arnett, Jack Berger, D. J. Beward, Henry Bush, Walter Carson, Edward Corkon, Herbert S. Cutler, Joseph M. Cadbury, Robert Drum, Edwin F. Finkel, W. R. Fries, Robert Fritch, Harry Goldstein, Quintin Kramer, Evelyn Kramer, Philip Livingston, William Lukens, Jr., Edward Manners,

E. Marshall, Philip Marvin, G. A. Prest, J. H. Prest, James Rice, Mark Robinson, George Spinner, Donald Stone, Philip B. Street, Mac Taylor, Richard Tucker, Katherine Tucker, Albert Zaid (Delaware Valley Ornithological Club and guests).

104. Middletown, Del. (north side of town to Noxontown Pond, Taylor's Bridge and Delaware River, thence along shore to Port Penn and back to Middletown; open farmland 45%, tidewater and river marshes 35%, deciduous woodlands 20%). — Dec. 23; dawn to dusk. Clear in a.m., rain in p.m.; temp. 34° to 40° F.; wind SE to N, 2-5 m.p.h.; ground bare; ponds frozen. Six observers, mostly in 2 parties. Total hours, 9 (7½ on foot, 1½ in car); total miles, 8½ (on foot). Great blue heron, 2; Canada goose, 2; goose sp. (small, dirty-grey underparts; immature white-fronted or blue goose? — W. P. H), 1; mallard, 13; black duck, 122; pintail, 1; ruddy duck, 8; Am. merganser, 59; turkey vulture, 22; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 6; bald eagle, 2; marsh hawk, 5; sparrow hawk, 7; killdeer, 4; great black-backed gull, 1; herring gull, 54; ring-billed gull, 38; mourning dove, 50; horned owl, 1; belted kingfisher, 1; yellow-shafted flicker, 3; red-bellied woodpecker, 6; downy woodpecker, 3; phoebe, 1; horned lark, 26; blue jay, 1; Am. crow, 75; Carolina chickadee, 5; tufted titmouse, 3; winter wren, 1; Carolina wren, 7; mockingbird, 4; robin, 1; eastern bluebird, 10; Am. pipit, 10; cedar waxwing, 1; starling, 173; myrtle warbler, 1; English sparrow, 26; eastern meadowlark, 8; red-wing, 29; grackle, 39; cowbird, 1; cardinal, 10; Am. goldfinch, 7; Savannah sparrow, 9; slate-colored junco, 14; tree sparrow, 27; field sparrow, 8; white-throated sparrow, 17; song sparrow, 6. **Total,** 53 species; 933 individuals. — Ethel Brady, Purnell McWhorter, Jr., Albert Hickin, Jr., Mary Leigh Pell, Stuyvesant B. Pell, Walden Pell, II.

105. Accokeek, Md. (east side of Potomac just below mouth of Piscataway Creek; area of about 2 square miles, comprising river front, cultivated river flat, wooded creek bottom, wooded swamp, cattail marsh, border of adjacent wooded upland, and upland farm; covered intensively on foot). — Dec. 22; 8 a.m. to 4:30 p.m. Clear, becoming hazy in midafternoon; temp 28° to 40°; no wind; ground bare, water open. Four observers in pairs or singly at different times. Total hours, 25; total miles, 13. Pied-billed grebe, 1; mallard, 3; black duck, 40; Am. golden-eye, 2; Am. merganser, 13; turkey vulture, 50; black vulture, 65; goshawk, 1 (studied 4 times at 100 to 300 feet through 8X binoculars; entirely light gray underparts, conspicuous pale gray superciliary, larger-than-crow size, and accipitrine form and flight noted — W. W. R.); red-tailed hawk, 2; red-shouldered hawk, 2; bald eagle, 5; killdeer, 12; herring gull, 30; ring-billed gull, 18; mourning dove, 30; belted kingfisher, 2; yellow-shafted flicker, 20; red-bellied woodpecker, 20; red-headed woodpecker, 30; yellow-bellied sapsucker, 3; hairy woodpecker, 9; downy woodpecker, 18; blue jay, 50; Am. crow, 40; fish crow, 1; Carolina chickadee, 35; tufted titmouse, 30; brown creeper, 4; winter wren, 8; Carolina wren, 25; mockingbird, 9; robin, 4; hermit thrush, 4; eastern bluebird, 22; golden-crowned kinglet, 20; starling, 1000; myrtle warbler, 12; English sparrow, 5; eastern meadowlark, 80; red-wing, 140; rusty blackbird, 25; cowbird, 1; cardinal, 40; Am. goldfinch, 25; Savannah sparrow, 10; slate-colored junco, 250; tree sparrow, 55; field sparrow, 50; white-throated sparrow, 250; swamp sparrow, 7; song sparrow, 175. **Total,** 51 species; 2753 individuals. — A. A. Baker, Edwin T. McKnight, Thomas B. Nolan, W. W. Rubey.

106. Chase (Baltimore County), Md. (west shore of Chesapeake Bay from Middle River to north shore of Gunpowder River, inland to B. & O. Railroad; habitats as described in 1945). — Dec. 21; 6:45 a.m. to 5:00 p.m. Clear; temp. 22° to 40°, wind NW, light in a.m., 8-12 m.p.h. in p.m.; ground bare, ice covering upper parts of most creeks and coves. Eighteen observers in 5 parties. Total hours, 25 (afoot); total miles, 32 afoot (practically none of the 60 car miles used for observation). Horned grebe, 1; great blue heron, 4; whistling swan, 930; Canada goose, 140; brant, 1 [no details — Ed.]; mallard, 5; black duck, 45; gadwall, 1; baldpate, 4775; green-winged teal, 18; redhead, 1505; canvasback, 1; lesser (?) scaup duck, 37; Am. golden-eye, 1; buffle-head, 10; ruddy duck, 98; hooded merganser, 2; Am. merganser, 86; turkey vulture, 26; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 5; red-shouldered hawk, 3; bald eagle, 9; marsh hawk, 4; sparrow hawk, 2; bob-white, 15; Am. coot, 1020; killdeer, 14; herring gull, 57; ring-billed gull, 7; screech owl, 1; barred owl, 2; belted kingfisher, 1; yellow-shafted flicker, 14; red-bellied woodpecker, 9; downy woodpecker, 14; blue jay, 33; Am. crow, 106; fish crow, 4; Carolina chickadee, 32; tufted titmouse, 31; white-breasted nuthatch, 12; brown creeper, 10; winter wren, 2; Carolina wren, 28; mockingbird, 2; hermit thrush, 2; eastern bluebird, 17; golden-crowned kinglet, 25; starling, 23; myrtle warbler, 78; yellow-throat, 1 (I. E. H.); English sparrow, 83; eastern meadowlark, 17; red-wing, 214; purple grackle, 1; cardinal, 32; Am. goldfinch, 29; slate-colored junco, 170; tree sparrow, 13; field sparrow, 5; white-throated sparrow, 101; swamp sparrow, 27; song sparrow, 40. **Total,** 65 species; 10,003 individuals. — William Berry, Gorman Bond, Ed Bougourd, Robert Bowen, Florence H. Burner, Compton Crook, Orville Crowder, Mrs. Emily N. Elder, Irving E. Hampe, Pearl Heaps, Werner Juhle, Haven Kolb, Ruth Lenderking, Billy McHoul, August Selckmann, Stephan Simon, Albert T. Swann, Jr., Etta Wedge (Maryland Ornithological Society).

107. Loch Raven (Baltimore Co.), Md. (from Towson around the lake, through Dulaney Valley;

time in different habitats divided as in 1945-46 counts). — Dec. 26; 6:45 a.m. to 4:45 p.m. Snowing until 9:00 a.m. (4 in.), partly cloudy thereafter; temp 28° at start, 36° at return; wind NW, 4-8 m.p.h.; ice on all smaller estuaries of lake. Observers together except for two 1-hour periods. Total party-hours, 12 (11 afoot, 1 by car); total party-miles, 35 (15 afoot, 20 by car). Black (?) duck, 3; Am. merganser, 8; turkey vulture, 237; red-tailed (?) hawk, 2; sparrow hawk, 1; killdeer, 3; mourning dove, 5; belted kingfisher, 2; yellow-shafted flicker, 1; downy woodpecker, 5; eastern phoebe, 1 (observed closely with 8X glass at sewer outlet as last year); blue jay, 2; Am. crow, 16; Carolina chickadee, 10; winter wren, 6; Carolina wren, 3; mockingbird, 1; robin, 2; eastern bluebird, 36; golden-crowned kinglet, 10; ruby-crowned kinglet, 1; starling, 20; myrtle warbler, 7; eastern meadowlark, 20; cardinal, 19; Am. goldfinch, 13; slate-colored junco, 25; tree sparrow, 27; white-throated sparrow, 26; swamp sparrow, 1; song sparrow, 17. **Total,** 31 species; 530 individuals. — David and Haven Kolb.

108. McCoole, (Allegany Co.), Md. (center of town to 1 mile east; center of town north along U. S. 220 to Dawson; town suburb 30%, open farmland 20%, deciduous woods 15%, coniferous planting 15%, pasture 20%). — Dec. 28; 8 a.m. to 6 p.m. Partly cloudy; temp. 32° to 44°; wind NW, 15-30 m.p.h. Total hours, 10; total miles, 21 (9 on foot, 12 by car). Cooper's hawk, 1; screech owl, 1; hairy woodpecker, 1; downy woodpecker, 4; Am. crow, 12; black-capped (?) chickadee, 2; tufted titmouse, 3; Carolina wren, 1; mockingbird, 3; hermit thrush, 2; starling, 12; palm warbler, 1; English sparrow, 85; cardinal, 11; eastern towhee, 1; slate-colored junco, 49; tree sparrow, 12; white-crowned sparrow, 13 (5 trapped and banded during census period, 1 collected, no adults seen); white-throated sparrow, 15; song sparrow, 9. **Total,** 20 species; 238 individuals. (Seen in area Dec. 21: catbird, 1.) — Leonard M. Llewellyn.

109. Oldtown, Md. (¼ mile north and 3 miles south along Potomac River and abandoned Chesapeake and Ohio Canal; deciduous woodland 20%, brush thickets 20%, swamp 10%, open farmland 50%). — Dec. 20; 8:30 a.m. to 4:00 p.m. Fair; temp. 22° to 30° F.; wind less than 1 m.p.h. Ten observers together. Total hours, 7½; total miles, 10 (6 by car, 4 on foot). Belted kingfisher, 2; pileated woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 22; Am. crow, 27; tufted titmouse, 3; white-breasted nuthatch, 10; winter wren, 3; Carolina wren, 3; mockingbird, 6; eastern bluebird, 5; starling, 24; English sparrow, 124; cardinal, 61; slate-colored junco, 49; tree sparrow, 18; white-throated sparrow, 12; swamp sparrow, 8; song sparrow, 3. **Total,** 19 species, 382 individuals. — Helen B. Miller, Nellie Thomas, Virgil Twigg, Jack Carder, George Voit, Robert Funkhouser, Donna Hogbin, Joanne Crabtree, Charles Devers, Eldon Long (Allegany County Bird Club).

110. Solomons (Calvert Co.), Md. (farmland 15%, marsh 10%, deciduous forest 10%, coniferous forest 15%, water 50%). — Dec. 21; 5:30 a.m. to 4:30 p.m. Clear; temp. 30° (min.) to 44° (max.); wind light N in a.m., moderate NE in p.m. Observers separate. Total hours, 29; total miles, 192 (145 by car, 18 on foot, 29 in 2 boats). Common loon, 4; red-throated loon, 12; horned grebe, 79; great blue heron, 3; ring-necked duck, 4; greater scaup duck, 8; lesser scaup duck, 60; Am. golden-eye, 312; buffle-head, 171; old-squaw, 684; white-winged scoter, 10; surf scoter, 14; ruddy duck, 855; red-breasted merganser, 8; turkey vulture, 72; black vulture, 46; sharp-shinned hawk, 3; red-tailed hawk, 6; bald eagle, 3; marsh hawk, 1; sparrow hawk, 2; killdeer, 24; herring gull, 203; ring-billed gull, 20; Bonaparte's gull, 2; mourning dove, 32; horned owl, 2; barred owl, 1; long-eared owl, 2; belted kingfisher, 2; yellow-shafted flicker, 5; hairy woodpecker, 2; downy woodpecker, 4; Am. crow, 286; fish crow, 1; Carolina chickadee, 21; tufted titmouse, 18; red-breasted nuthatch, 1; Carolina wren, 20; mockingbird, 5; robin, 38; hermit thrush, 9; eastern bluebird, 64; golden-crowned kinglet, 1; ruby-crowned kinglet, 1; starling, 265; myrtle warbler, 24; English sparrow, 140; eastern meadowlark, 40; red-wing, 785; cowbird, 12; cardinal, 33; Am. goldfinch, 29; eastern towhee, 6; slate-colored junco, 17; tree sparrow, 19; field sparrow, 4; white-throated sparrow, 124; fox sparrow, 4; song sparrow, 62. **Total,** 60 species; 4685 individuals. — Edwin B. Barry, Coit M. Coker, George F. Kelly.

111. Southeastern Worcester County, Md. (7½-mile radius centered 5 miles SE by E of Snow Hill; barrier beach 20%, Chincoteague Bay 20%, Pocomoke River swamp 15%, loblolly pine stands 15%, agricultural lands 15%, salt marsh 10%, upland deciduous woods 3%, residential areas 2%). — Dec. 22; 6:45 a.m. to 4:45 p.m. Clear; temp. 28° to 43°; wind NW, 0-10 m.p.h.; ground bare; ponds and margins of Pocomoke River frozen. Nine observers in 5 parties. Total party-hours, 41; total miles, 152 (94 by car, 20 on foot, 28 by motorboat, 10 by canoe). Common loon, 18; red-throated loon, 3; horned grebe, 63; double-crested cormorant, 2; great blue heron, 12; Canada goose, 42; brant, 3730; mallard, 35; black duck, 2130; baldpate, 1; pintail, 13; wood duck, 5; canvas-back, 600; scaup duck (sp.), 10,000; Am. golden-eye, 46; buffle-head, 642; old-squaw, 927; white-winged scoter, 565; surf scoter, 75; Am. scoter, 71; hooded merganser, 7; Am. merganser, 2; red-breasted merganser, 7; turkey vulture, 144; sharp-shinned hawk, 2; Cooper's hawk, 4; red-tailed hawk, 5; red-shouldered hawk, 2; bald eagle, 4; marsh hawk, 7; osprey, 1 (C.S.R.); sparrow hawk, 15; killdeer, 158; sanderling, 1; great black-backed gull, 7; herring gull, 277; ring-billed gull, 154; mourning dove, 11; barred

owl, 3; belted kingfisher, 5; yellow-shafted flicker, 94; pileated woodpecker, 15; red-bellied woodpecker, 14; yellow-bellied sapsucker, 1; hairy woodpecker, 13; downy woodpecker, 56; eastern phoebe, 11; horned lark, 154 (2 northerns; all others seen at close range were prairies); blue jay, 1; Am. crow, 523; fish crow, 8; Carolina chickadee, 118, tufted titmouse, 47; white-breasted nuthatch, 25; brown creeper, 12; winter wren, 20; Carolina wren, 36: short-billed marsh wren, 12; mockingbird, 4; catbird, 3; brown thrasher, 2; robin, 15; hermit thrush, 60; eastern bluebird, 63; golden-crowned kinglet, 33; ruby-crowned kinglet, 4; Am. pipit, 5; cedar waxwing, 15; starling, 723; myrtle warbler, 1790; palm warbler (western), 11; black-capped (Wilson's) warbler, 1 ♀ (collected—C.S.R.); English sparrow, 65; eastern meadowlark, 168; red-wing, 1490; grackle (sp.), 63; cowbird, 84; cardinal, 52; purple finch, 15; Am. goldfinch, 132; eastern towhee, 9; Savannah sparrow, 51; sharp-tailed sparrow, 1; vesper sparrow, 21; slate-colored junco, 243; chipping sparrow, 39; field sparrow, 169; white-throated sparrow, 400; fox sparrow, 11; swamp sparrow, 20; song sparrow, 112. **Total,** 91 species (1 additional subspecies); approximately 26,830 individuals. — Elting Arnold, Irston R. Barnes, John H. Buckalew, Neil Hotchkiss, Leonard M. Llewellyn, M. Brooke Meanley, Chandler S. Robbins, Robert E. Stewart, John E. Willoughby.

112. Southern Dorchester County, Md. (Blackwater National Wildlife Refuge, Bishops Head, Fishing Bay, Savannah Lake, and Elliott Island; brackish marsh 40%, loblolly pine 25%, ponds, bays and estuaries 20%, fields 10%, deciduous woods 5%). — Dec. 21; 6:30 a.m. to 6:15 p.m. Clear; wind NW, 0-18 m.p.h.; temp. 28° to 46° to 36°; ground bare; fresh water ponds and brackish marshes frozen. Nine observers in 4 parties. Total party-hours, 37; total miles, 123 (23 on foot, 14 in motorboat, 86 by car). Horned grebe, 30; pied-billed grebe, 1; great blue heron, 17; Am. egret, 5; black-crowned night heron, 2; whistling swan, 154; Canada goose, 1570; mallard, 133; black duck, 1580; gadwall, 56; European widgeon, 1 drake (C.S.R., J.E.W.); baldpate, 545; pintail, 114; green-winged teal, 509; blue-winged teal, 38 (2 flocks — R.E.S.); shoveller, 8 (R.E.S., M.B.M.); redhead, 20; canvas-back, 590; scaup duck (sp.), 105; Am. golden-eye, 31; buffle-head, 37; ruddy duck, 393; hooded merganser, 4; Am. merganser, 61; red-breasted merganser, 20; turkey vulture, 128; sharp-shinned hawk, 4; Cooper's hawk, 7; red-tailed hawk, 12; red-shouldered hawk, 3; rough-legged hawk, 1; bald eagle, 15; marsh hawk, 31; pigeon hawk, 1 (seen perched at 15 feet — M. B. M.); sparrow hawk, 11; Am. coot, 10; killdeer, 11; greater yellow-legs, 1; herring gull, 66; ring-billed gull, 253; mourning dove, 36; barn owl, 2; horned owl, 6; barred owl, 2; belted kingfisher, 7; yellow-shafted flicker, 23; pileated woodpecker, 8; red-bellied woodpecker, 9; hairy woodpecker, 16; downy woodpecker, 30; horned lark, 2; blue jay, 18; Am. crow, 437; fish crow, 2; Carolina chickadee, 95; tufted titmouse, 39; brown-headed nuthatch, 52; brown creeper, 11; winter wren, 20; Carolina wren, 23; long-billed marsh wren, 2; short-billed marsh wren, 20; mockingbird, 2; catbird, 1; robin, 1; hermit thrush, 16; eastern bluebird, 68; golden-crowned kinglet, 28; ruby-crowned kinglet, 3; Am. pipit, 215; cedar waxwing, 1; starling, 250; myrtle warbler, 812; pine warbler, 2; yellow-throat, 1 (M. B. M.); English sparrow, 110; eastern meadowlark, 230; red-wing, 1060; rusty blackbird, 1; grackle (sp.), 306; cowbird, 21; cardinal, 28; Am. goldfinch, 110; eastern towhee, 21; Savannah sparrow, 24; slate-colored junco, 113; tree sparrow, 12; chipping sparrow, 2; field sparrow, 125, white-throated sparrow, 108; fox sparrow, 20; swamp sparrow, 347; song sparrow, 211. **Total,** 93 species; approximately 11,687 individuals. — Ernest Baldwin, Irston R. Barnes, Robert Jasse, Leonard M. Llewellyn, M. Brooke Meanley, Chandler S. Robbins, Napier Shelton, Robert E. Stewart, John E. Willoughby.

113. Susquehanna Flats — Sassafras River, Md. (Havre de Grace, Perry Point, Carpenter Point, Elk Neck, and mouth of Sassafras River; bays and estuaries 70%, woods 20%, fields 10%). — Dec. 20; 8:12 a.m. to 5 p.m. Clear; wind NW, 5-10 m.p.h.; temp. 5° to 32°; ground bare; many small bays and estuaries and margins of Chesapeake Bay frozen. Three observers, separate for 1 hour, together the remainer of the day. Total party-hours, 9; total miles, 40 (4 on foot, 36 by car). Common loon, 2; whistling swan, 3481; Canada goose 1564; mallard, 3; black duck, 1435; baldpate, 10; pintail, 506; redhead, 18; ring-necked duck, 158; canvas-back, 43,870; scaup duck (sp.), 500; Am. golden-eye, 21; buffle-head, 6; ruddy duck, 245; hooded merganser, 6; Am. merganser, 114; turkey vulture, 65; sharp-shinned hawk, 1; red-tailed hawk, 2; bald eagle, 1; marsh hawk, 1; sparrow hawk, 2; Am. coot, 255; killdeer, 4; herring gull, 7; ring-billed gull, 254; barred owl, 1; belted kingfisher, 3; yellow-shafted flicker, 2; red-bellied woodpecker, 3; yellow-bellied sapsucker, 2; hairy woodpecker, 2; downy woodpecker, 7; horned lark (all seen at close range were prairies), 79; blue jay, 5; Am. crow, 11; fish crow, 103; Carolina chickadee, 7; tufted titmouse, 11; white-breasted nuthatch, 2; brown creeper, 5; winter wren, 2; Carolina wren, 6; mockingbird, 2; hermit thrush, 2; eastern bluebird, 1; golden-crowned kinglet, 4; ruby-crowned kinglet, 1; starling, 2400; myrtle warbler, 2; English sparrow, 123; red-wing, 190,000 (est.); grackle, 10,000 (est.); cowbird, 100 (est.); cardinal, 11; Am. goldfinch, 4; slate-colored junco, 27; tree sparrow, 31; field sparrow, 12; white-throated sparrow, 26; swamp sparrow, 5; song sparrow, 24. **Total,** 62 species; approximately 255,557 individuals. — M. Brooke Meanley, Chandler S. Robbins, Robert E. Stewart.

114. Washington, D. C. (same area as in past 2 years; water 20%, marsh 5%, brushy swamp 5%, bottomland woods 25%, upland deciduous woods 25%, pine woods 5%, fields 5%, suburban 10%, plus 15 feeding stations reported). — Dec. 20; 6:30 a.m. to 5:30 p.m. Fair; temp. 20° to 40° F.; no appreciable wind; ground clear, dry; water open, except more sheltered parts of still areas. Fifty-five observers in 7 parties, plus 12 others at feeding stations. Total hours, 76 (5 in cars, 69 on foot, 2 in boat); total miles, 151 (74 by car, 75 on foot, 2 by boat). Horned grebe, 2; great blue heron, 9; black-crowned night heron, 2; mallard, 80; black duck; 404; gadwall, 3; pintail, 205; green-winged teal, 18; canvas-back, 1; Am. golden-eye, 4; ruddy duck, 86; hooded merganser, 4; Am. merganser, 246; red-breasted merganser, 1; turkey vulture, 204; black vulture, 24; sharp-shinned hawk, 1; Cooper's hawk, 4; red-tailed hawk, 6; red-shouldered hawk, 8; bald eagle, 9; marsh hawk, 2; duck hawk, 1; sparrow hawk, 7; bob-white, 24; Am. coot, 3; killdeer, 50; herring gull, 454; ring-billed gull, 146; mourning dove, 13; barn owl, 2; screech owl, 2; barred owl, 4; belted kingfisher, 9; yellow-shafted flicker, 26; red-bellied woodpecker, 28; yellow-bellied sapsucker, 5; hairy woodpecker, 19; downy woodpecker, 126; eastern phoebe, 1 (6X glasses at 60 feet at bridge, Rock Creek Park — W. S. G.); blue jay, 101; Am. crow, 546; fish crow, 37; Carolina chickadee, 328; tufted titmouse, 292; white-breasted nuthatch, 142; red-breasted nuthatch, 1; brown creeper, 27; winter wren, 13; Carolina wren, 78; mockingbird, 77; catbird, 1 (R. T., R. L. T.); robin, 2; hermit thrush, 16; eastern bluebird, 70; golden-crowned kinglet, 45; ruby-crowned kinglet, 10; cedar waxwing, 33; loggerhead shrike, 1; starling, 5766; myrtle warbler, 213; English sparrow, 656; eastern meadowlark, 4; red-wing, 40; rusty blackbird, 2; cardinal, 274; purple finch, 4; Am. goldfinch, 120; eastern towhee, 14; Savannah sparrow, 1 (I. R. B.); slate-colored junco, 695; tree sparrow, 24; field sparrow, 107; white-throated sparrow, 563; fox sparrow, 19; swamp sparrow, 13; song sparrow, 342. **Total,** 77 species; 12,920 individuals. — John W. Aldrich, Edith Armstrong, Elting Arnold, Ernest Baldwin, Irston R. Barnes, Robert Bartl, Fern Bell, Boyakin Bird, John Brady, Jr., Dorothy Bratz, Robert Bratz, Shirley Briggs, Nettie Mae Burgess, Donald Byington, C. L. Camp, C. C. Carson, Henry Collins III, Eleanor Cooley, Joan H. Criswell, Edwin G. Davis, Thomas Donnelly, Dorothy Dreese, Louise Duke, Philip DuMont, Mrs. C. F. Duvall, Myron Elliott, Marian Elliott, A. H. Fast, W. S. Garges, Jr., Doris C. Grautoff, Walter B. Grautoff, Fred T. Griffin, Irvin Hoffman, Duane Holm, Wayne Holm, Helen Johnston, Katherine Keeley, Charles N. Mason, Gerald Mersereau, Kenneth Nelson, Fred M. Packard, Roger Tory Peterson, Jane Pierce, Charles L. Preston, June Reynolds, Abbey Rowe, Napier Shelton, George H. Sigel, Harold B. Stabler, E. Jeanne Stivers, Ruth Strosnider, John Taylor, Jr., Donald M. Thatcher, Franklin Thompson, Frank Thornhill, Richard Tousey, Ruth L. Tousey, Karl Trever, Martha Trever, Jane Tuttrup, Lorina M. Wendt, Alexander Wetmore, R. Donald Widman, Mrs. Andrew C. Wilkins, Francis Williamson, John E. Willoughby, Rufus Wolff (Audubon Society of the District of Columbia).

115. Back Bay National Wildlife Refuge, Pungo, Va. (Back Bay Refuge and beach to Virginia Beach; open water and brackish marsh 80%, ocean beach 20%). — Dec. 21; 7:30 a.m. to 4:30 p.m. Overcast; temp. 32° to 40° F.; wind N, 5 m.p.h.; ground bare. Observers together. Total hours, 9 (4 in car, 3 in boat, 2 on foot); total miles, 38 (16 in car, 20 in boat, 2 on foot). Common loon, 8; gannet, 27; great blue heron, 4; whistling swan, 3000 (est.); Canada goose, 10,000 (est.); snow goose, 18,000 (est.); blue goose, 10; mallard, 6; black duck, 500 (est.); gadwall, 5; baldpate, 10,000 (est.); pintail, 44; green-winged teal, 300 (est.); redhead, 10,000 (est.); ring-necked duck, 5000 (est.); canvas-back, 10,000 (est.); lesser scaup duck, 15,000 (est.); buffle-head, 3; white-winged scoter, 1; ruddy duck, 300 (est.); red-breasted merganser, 13; bald eagle, 6; marsh hawk, 7; sparrow hawk, 2; Am. coot, 20,000 (est.); black-bellied plover, 1; sanderling, 26; great black-backed gull, 1; herring gull, 250 (est.); ring-billed gull, 750 (est.); belted kingfisher, 1; fish crow, 1; Carolina wren, 1; mockingbird, 1; eastern bluebird, 6; myrtle warbler, 8; eastern meadowlark, 30; red-wing, 35; boat-tailed grackle, 5; Savannah sparrow, 5; song sparrow, 7. **Total,** 41 species; approximately 103,364 individuals. [Seen in area Dec. 22, razor-billed auk (J.E.P.)]. — Ray J. Beasley, Jack E. Perkins.

116. Blacksburg (Montgomery Co.), Va. (V.P.I. campus and farm, Strouble's Creek to New River, Brush Mt. and Tom's Creek to New River, along New River from mouth of Strouble's Creek to Goodwin's Ferry, same course as last year; woods 45%, farmland 35%, river-bottom 20%). — Dec. 21; 6:30 a.m. to 5:00 p.m. Clear (visibility poor, bad ground haze); temp. 20° at start, 28° at return; wind W, 1 m.p.h.; ground bare. Five observers in 4 groups. Total hours, 40½ on foot (car used by 1 group in shifting from point to point); total miles, 65 (40 on foot, 25 by car). Mallard, 120; black duck, 76; gadwall, 1; baldpate, 20; greater scaup duck, 2; Am. golden-eye, 20; buffie-head, 51; hooded merganser, 3; turkey vulture, 21; Cooper's hawk, 3; red-tailed hawk, 1; red-shouldered hawk, 4; marsh hawk, 1; sparrow hawk, 12; ruffed grouse, 1; bob-white, 30 (two coveys); Am. coot, 1; killdeer, 8; Wilson's snipe, 10; mourning dove, 29; screech owl, 7; belted kingfisher, 4; yellow-shafted flicker, 6; pileated woodpecker, 3; red-bellied woodpecker, 4; red-headed woodpecker, 17; yellow-bellied sap-

sucker, 1; hairy woodpecker, 4; downy woodpecker, 17; eastern phoebe, 3; horned lark (prairie), 101; blue jay, 27; Am. crow, 506; chickadee (sp.; both Carolina and black-capped present), 98; tufted titmouse, 57; white-breasted nuthatch, 15; red-breasted nuthatch, 13; brown creeper, 15; winter wren, 19; Carolina wren, 22; mockingbird, 20; robin, 3; hermit thrush, 8; eastern bluebird, 27; golden-crowned kinglet, 64; cedar waxwing, 10; loggerhead shrike, 1; starling, 1600 (est.); palm warbler (western), 1; English sparrow, 130; eastern meadowlark, 46; cardinal, 118; Am. goldfinch, 61; eastern towhee, 2; slate-colored junco, 340 (est.); tree sparrow, 59; field sparrow, 89; white-crowned sparrow, 56; white-throated sparrow, 16; fox sparrow, 3; swamp sparrow, 2; song sparrow, 116. **Total,** 62 species; approximately 4125 individuals. — C. O. Handley, Sr. and Jr.; John Handley, Robert J. Watson, J. W. Murray.

117. Brooke, Va. (4 areas within 5½ miles of Brooke, including immediate environs of Brooke, point between mouth of Aquia Creek and Potomac River, southwest side of Aquia Creek at mouth, and point between Accakeek Creek and Potomac River at mouth of Potomac Creek; open farmlands and hedgerows 30%, waterfront 30%, deciduous woods 25%, deciduous slash 5%, pine woods 5%, cattail marsh 5%). — Dec. 20; 7:45 a.m. to 4:45 p.m. Fair; temp. 18° to 35°; gentle N wind in p.m.; ground bare; water open. Five observers in 2 parties, working singly, in pairs, or in triples at different times during the day. Total hours, 21; total miles, 10. Common loon, 3; great blue heron, 9; whistling swan, 140; mallard, 60; black duck, 375; gadwall, 7; baldpate, 3; pintail, 2; ring-necked duck, 6; canvas-back, 1; lesser (?) scaup duck, 3; Am. golden-eye, 10; buffle-head, 4; ruddy duck, 5; hooded merganser, 40; Am. merganser, 300; red-breasted merganser, 9; turkey vulture, 30; black vulture, 3; red-tailed hawk, 1; red-shouldered hawk, 1; bald eagle, 9; marsh hawk, 2; killdeer, 1; herring gull, 5; ring-billed gull, 7; undifferentiated herring and ring-billed gulls, 130; mourning dove, 75; belted kingfisher, 4; yellow-shafted flicker, 10; pileated woodpecker, 3; red-bellied woodpecker, 4; red-headed woodpecker, 3; yellow-bellied sapsucker, 1; hairy woodpecker, 1; downy woodpecker, 11; horned lark, 1; blue jay, 30; Am. crow, 135; fish crow, 30; Carolina chickadee, 13; tufted titmouse, 17; brown creeper, 2; winter wren, 10; Carolina wren, 16; mockingbird, 10; robin, 100; hermit thrush, 14; eastern bluebird, 100; golden-crowned kinglet, 10; ruby-crowned kinglet, 4; cedar waxwing, 30; loggerhead shrike, 1; starling, 50; myrtle warbler, 90; English sparrow, 25; eastern meadowlark, 62; red-wing, 65; cardinal, 40; Am. goldfinch, 40; eastern towhee, 1; Savannah sparrow, 10; slate-colored junco, 50; tree sparrow, 25; field sparrow, 105; white-throated sparrow, 130; swamp sparrow, 1; song sparrow, 90. **Total,** 67 species; approximately 2585 individuals. — A. A. Baker, Alvin C. Graves, Edwin T. McKnight, Thomas B. Nolan, W. W. Rubey.

118. Charlottesville, Va. (Albemarle Lake, Henley's Lake, Thraves' Pond, city reservoir, 8 miles along Rivanna and South Fork Rivanna River from Burnt Mills to town; open fields 25%, weed fields 10%, deciduous woods 10%, pine woods 5%, lakes and reservoir 10%, river-bottom 40%). — Dec. 22; 7:00 a.m. to 5:15 p.m. Fair; temp. 28° to 41°; no wind; lakes partially frozen. Four observers (3 parties in a.m., 2 parties in p.m.). Total hours, 30; total miles, 67 (45 by car, 22 afoot). Mallard, 4; black duck, 18; Am. golden-eye, 2; turkey vulture, 56; black vulture, 1; sharp-shinned hawk, 1; Cooper's hawk, 4; red-tailed hawk, 1; red-shouldered hawk, 1; bald eagle, 1 (ad.); sparrow hawk, 6; mourning dove, 80; belted kingfisher, 2; yellow-shafted flicker, 9; pileated woodpecker, 7; red-bellied woodpecker, 9; yellow-bellied sapsucker, 2; hairy woodpecker, 3; downy woodpecker, 26; eastern phoebe, 4; horned lark (prairie), 1; blue jay, 11; Am. crow, 605; fish crow, 11; Carolina chickadee, 59; tufted titmouse, 30; white-breasted nuthatch, 14; red-breasted nuthatch, 2; brown creeper, 7; winter wren, 14; Carolina wren, 38; mockingbird, 30; hermit thrush, 9; eastern bluebird, 76; golden-crowned kinglet, 54; ruby-crowned kinglet, 1; cedar waxwing, 7; loggerhead shrike, 2; starling, 230; English sparrow, 77; eastern meadowlark, 21; red-wing, 325; cowbird, 6; cardinal, 162; Am. goldfinch, 22; slate-colored junco, 551; tree sparrow, 89; field sparrow, 99; white-throated sparrow, 142; fox sparrow, 21; swamp sparrow, 3; song sparrow, 113. **Total,** 52 species; 3069 individuals. (Seen during period: chipping sparrow, 3.) — John H. Grey, Jr., Kenneth Lawless, William F. Minor, Charles E. Stevens, Jr.

119. Danville (Pittsylvania Co.), Va. (circle around the town with a radius of about 3 miles; Ballou Park 15%, Dan River Lakes 10%, city streets 5%, scrubby bottomland 5%, deciduous woods 10%, river bottomland 30%, golf course 20%, open weed fields 5%). — Dec. 22; 7:45 a.m. to 5:15 p.m., 1 hour out for lunch. Clear; temp. 23° to 45° F.; wind NE, 5 m.p.h., part of lake frozen, swamp frozen over, river open. Four observers in 2 parties during a.m., 3 observers together in p.m. Total miles, 24 (10 on foot, 14 by car). Great blue heron, 1; black duck, 9; turkey vulture, 10; black vulture, 1; Cooper's hawk, 2; killdeer, 10; mourning dove, 20; yellow-shafted flicker, 1; hairy woodpecker, 1; downy woodpecker, 5; eastern phoebe, 2; blue jay, 4; Am. crow, 22; Carolina chickadee, 34; tufted titmouse, 9; white-breasted nuthatch, 3; brown creeper, 2; Carolina wren, 9; hermit thrush, 1; eastern bluebird, 10; mockingbird, 6; golden-crowned kinglet, 26; ruby-crowned kinglet, 18; loggerhead shrike, 2; starling, 165 (partly est.); English sparrow, 12; eastern meadowlark, 3; cardinal, 29; Am. goldfinch, 10; eastern towhee, 3;

Savannah sparrow, 1; slate-colored junco, 123 (partly est.); white-throated sparrow, 97 (partly est.); song sparrow, 7. **Total,** 34 species; 658 individuals. (Observed during period: winter wren, 1; sparrow hawk, 1; barred owl, 1.) — Johnny Westbrook, McLin Choate, Jr., Royster Lyle, Royster Lyle, Jr.

120. Fairfield (Rockbridge Co.), Va. (village of Fairfield north and east to South River, along river to mouth of Irish Creek, 8 miles from Fairfield, and return; village yards and gardens 10%, open fields 30%, hardwood forest 30%, stream banks 30%). — Dec. 20; 7 a.m. to 5 p.m. Clear; temp. 26° at start, 34° at 2 p.m.; wind almost imperceptible; heavy frost, light skim of ice on still water. Total miles, 20 (8 on foot, 12 by car). Turkey vulture, 16; black vulture, 13; sparrow hawk, 3; killdeer, 3; mourning dove, 2; yellow-shafted flicker, 1; red-bellied woodpecker, 1; yellow-bellied sapsucker, 1; downy woodpecker, 2; eastern phoebe, 1; blue jay, 2; raven, 1; Am. crow, 37; black-capped chickadee, 7; Carolina chickadee, 4; tufted titmouse, 11; white-breasted nuthatch, 1; Carolina wren, 5; mockingbird, 3; eastern bluebird, 13; loggerhead shrike, 2; starling, 20; English sparrow, 42; eastern meadowlark, 1; cardinal, 19; slate-colored junco, 5; tree sparrow, 1; field sparrow, 2; white-throated sparrow, 3; song sparrow, 2. **Total,** 30 species; 224 individuals. — Rev. and Mrs. W. B. Clemmons, Anne, Martha and Bill Clemmons, Jr., Draper Fultz.

121. Harrisonburg, Va. (Waterman Wood to Tide Spring; oak-hickory-cedar-pine woodlot 60%, oak-hickory woodlot 10%, small village bordering school campus 10%, cedar-pine wasteland 10%; pasture field and fence rows 10%). — Small pond in oak-hickory woodlot covered with thin sheet of ice. Ground frozen, but no snow nor frost. Dec. 23; 8:00 a.m. to 3:00 p.m. Overcast; temp. 35° to 45° to 41°; wind SE to NW, 0-4 m.p.h. Observers together (within calling distance). Total hours, 7 on foot; total miles, 8 on foot. Turkey vulture, 19; red-tailed hawk, 1; bald eagle (immature), 1; sparrow hawk, 2; mourning dove, 1; flicker, 1; hairy woodpecker, 2; downy woodpecker, 7; blue jay, 3; Am. crow, 176; Carolina chickadee, 34; tufted titmouse, 38; white-breasted nuthatch, 5; winter wren, 1; Carolina wren, 1; mockingbird, 9; robin, 1; eastern bluebird, 6; starling, 367; myrtle warbler, 1; English sparrow, 58; eastern meadowlark, 1; cardinal, 37; purple finch, 2; Am. goldfinch, 12; slate-colored junco, 155; tree sparrow, 17; white-crowned sparrow, 1; white-throated sparrow, 2; song sparrow, 3. **Total,** 30 species; 964 individuals. — Max Carpenter, Daniel Suter, Richard Weaver, D. Ralph Hostetter.

122. Lexington, Va. (same area as in former years; town 5%, Big Spring Pond 5%, farmland 20%, cedar woods 35%, oak woods 25%, scrub 10%). — Dec. 22; 7:30 a.m. to 5:30 p.m., 1 hour out for lunch. Clear in a.m., cloudy in p.m., temp. 24° to 42°; practically no wind; ground frozen; streams mostly open. Nine observers in 1 party, 4 all day, 5 half time. Total hours, 9 (on foot), car used only in shifting points; total miles, 33 (10 on foot, 23 by car). Mallard, 3; black duck, 2; turkey vulture, 13; black vulture, 5; sharp-shinned hawk, 2; sparrow hawk, 4; killdeer, 3; woodcock, 2; Wilson's snipe, 1; mourning dove, 24; belted kingfisher, 1; yellow-shafted flicker, 17; pileated woodpecker, 5; red-bellied woodpecker, 3; downy woodpecker, 10; horned lark, 57; blue jay, 7; Am. crow, 176; black-capped chickadee (J. J. M.), 2; Carolina chickadee, 19; tufted titmouse, 13; white-breasted nuthatch, 5; winter wren, 2; Carolina wren, 8; mockingbird, 17; robin, 1; hermit thrush, 6; eastern bluebird, 39; golden-crowned kinglet, 3; ruby-crowned kinglet, 1; loggerhead shrike, 2; starling, 282; myrtle warbler, 40; English sparrow, 46; eastern meadowlark, 53; rusty blackbird, 2; cardinal, 52; Am. goldfinch, 28; slate-colored junco, 103; field sparrow, 10; white-crowned sparrow, 1; white-throated sparrow, 78; song sparrow, 13. **Total,** 43 species; 1161 individuals. (Recently killed great blue heron found at Big Spring.) — J. J. Murray, R. P. Carroll, Robert Paxton, James Murray, Jr., Alice Carroll, Dickson Vardell Murray, W. L. Richards, John Chapman, Gordon Echols.

123. Lynchburg, Va. (Timber Lake, Airport, Tomahawk Swamp and Graves' Mill, College Lake and Riverside Park; fields 30%, woods 70%). — Dec. 27; 7:10 a.m. to 12:30 p.m., 1:30 to 5:30 p.m. Partly cloudy; temp. 33° to 40°; wind, WSW, 0-18 m.p.h.; ground bare; some ice on lakes. Two parties in a.m., 1 in p.m. Total hours, 14 (12 on foot, 2 by car); total miles, 54½ (15 on foot, 39½ by car). Turkey vulture, 12; black vulture, 10; sparrow hawk, 1; bob-white, 6; mourning dove, 4; belted kingfisher, 2; yellow-shafted flicker, 8; red-bellied woodpecker, 2; hairy woodpecker, 1; downy woodpecker, 12; blue jay, 13; Am. crow, 281; Carolina chickadee, 36; titmouse, 13; white-breasted nuthatch, 17; red-breasted nuthatch, 1; winter wren, 4; Carolina wren, 14; mockingbird, 4; hermit thrush, 2; eastern bluebird, 26; golden-crowned kinglet, 2; ruby-crowned kinglet, 1; cedar waxwing, 70; starling, 132; myrtle warbler, 5; English sparrow, 18; rusty blackbird, 8; cowbird, 5; cardinal, 38; purple finch, 1; Am. goldfinch, 68; Savannah sparrow, 3; slate-colored junco, 130; tree sparrow, 3; chipping sparrow, 1; field sparrow, 17; white-throated sparrow, 90; swamp sparrow, 2; song sparrow, 24. **Total,** 40 species; approximately 1087 individuals. — Jane Freer, Ruskin S. Freer, Kenneth Lawless, Bill McIntosh, C. H. Shaffer, Kingsley Stevens, Mr. and Mrs. James W. Wiltshire, Jr. (latter 2, a.m. only).

124. Richmond, Va. (same area as in 3 previous years; open farmland 30%, pine woodland 10%, deciduous woodland 22%, residential districts 8%, marshes and river shore 30%). — Dec. 22; dawn to

dusk. Fair; temp. 25° to 51° F.; wind NE, 2-10 m.p.h.; ground bare; still water 20% frozen. Total hours, 10 (on foot); total miles, 6 (on foot). Canada goose, 5200 (est.); snow goose, 2; mallard, 160 (partly est.); black duck, 88; baldpate, 24; pintail, 260 (est.); wood duck, 6; ring-necked duck, 101; lesser scaup duck, 3; Am. golden-eye, 1; ruddy duck, 4; Am. merganser, 7; turkey vulture, 17; black vulture, 40; bald eagle, 1; sparrow hawk, 2; Am. coot, 76; killdeer, 4; herring gull, 11; ring-billed gull, 25; mourning dove, 21; belted kingfisher, 3; yellow-shafted flicker, 4; pileated woodpecker, 1; red-bellied woodpecker, 4; yellow-bellied sapsucker, 1; hairy woodpecker, 2; downy woodpecker, 6; horned lark (prairie), 170 (est); blue jay, 3; Am. crow, 54; Carolina chickadee, 16; tufted titmouse, 5; white-breasted nuthatch, 3; brown creeper, 1; winter wren, 2; Carolina wren, 8; mockingbird, 12; robin, 3; hermit thrush, 4; eastern bluebird, 8; golden-crowned kinglet, 4; ruby-crowned kinglet, 1; cedar waxwing, 2; loggerhead shrike, 1; starling, 22; myrtle warbler, 8; English sparrow, 4; eastern meadowlark, 108; red-wing, 55; rusty blackbird, 9; cardinal, 23; purple finch, 8; Am. goldfinch, 3; eastern towhee, 1; slate-colored junco, 61; field sparrow, 25; white-throated sparrow, 72; song sparrow, 28. **Total,** 59 species; about 6798 individuals. (Seen in area during period: gadwall, 1.) — F. R. Scott.

125. Shenandoah National Park, Va. (Big Meadows, Fishers Gap, Cedar Run Trail from Hawksbill Gap to White Oak Canyon and up canyon trail to Appalachian Trail, Skyland, Stony Man, Tanners Ridge, area about Bearfence Mt., Lewis Mt. and upper Devil's Ditch; altitude 2600-4000 ft.; deciduous woods 75%, hemlock groves 15%, abandoned fields 7%, marsh 3%). — Dec. 27; 6:45 a.m. to 5:30 p.m. Partly cloudy with snow flurries in a.m.; temp. 26° to 33°; wind NW, 20-30 m.p.h. on ridge; 1-inch snow, marsh frozen. Two observers working singly in a.m. and together in p.m Total hours, 15; total miles, 20 (afoot). Turkey vulture, 1; ruffed grouse, 13; pileated woodpecker, 2; red-bellied woodpecker, 3; hairy woodpecker, 4; downy woodpecker, 8; raven, 8; Am. crow, 4; Carolina chickadee, 10; tufted titmouse, 13; white-breasted nuthatch, 3; brown creeper, 1; Carolina wren, 1; robin, 2; eastern bluebird, 5; golden-crowned kinglet, 2; starling, 13; pine siskin, 1; slate-colored junco, 55 (of those closely observed 20 were Carolina and 11 typical slate-colored); tree sparrow, 1; song sparrow, 2. **Total,** 21 species (1 additional subspecies); 152 individuals. — Fred R. Scott, Chas. E. Stevens, Jr.

126. Sweet Briar, Va. (Sweet Briar College campus; cut-over pine and deciduous woods 30%, brushy creek bottoms 20%, lake edges 15%, pasture 10%, mature deciduous woods 10%, newly plowed fields 10%, about yards and buildings 5%). — Dec. 21; 7 a.m. to 5 p.m. Clear; temp. 30° to 60°; wind less than 1 m.p.h. Total hours, 8; total miles, 7. Turkey vulture, 3; red-tailed hawk, 2; yellow-shafted flicker, 20; pileated woodpecker, 3; red-bellied woodpecker, 1; yellow-bellied sapsucker, 2; hairy woodpecker, 2; downy woodpecker, 6; eastern phoebe, 1; blue jay, 2; Am. crow, 27; Carolina wren, 5; winter wren, 5; Carolina chickadee, 8; white-breasted nuthatch, 3; brown creeper, 2; mockingbird, 4; eastern bluebird, 15; golden-crowned kinglet, 2; ruby-crowned kinglet, 2; tufted titmouse, 8; loggerhead shrike, 1; starling, 38; myrtle warbler, 10; English sparrow, 22; eastern meadowlark, 5; cardinal, 9; Am. goldfinch, 6; slate-colored junco, 75; field sparrow, 3; white-throated sparrow, 28; song sparrow, 18. **Total,** 32 species; 338 individuals. — Samuel Guss, Robert Giles, Gertrude Prior.

127. Warren (Albemarle County), Va. (James River from Hatton to Warren, areas about Esmont, Rock Castle Creek, Keene, and Powell Store; open fields 45%, river-bottom 30%, pine woods 15%, cedar groves 5%, deciduous woods 5%). — Dec. 24; 7:45 a.m. to 4:45 p.m. Fair; temp. 29° to 40°; wind NW, 1-7 m.p.h. Three observers together. Total hours, 9; total miles, 30 (18 by car, 12 afoot). Turkey vulture, 32; black vulture, 19; red-tailed hawk, 1; red-shouldered hawk, 1; marsh hawk, 1; sparrow hawk, 3; bob-white, 9; wild turkey, 1 (seen by hunter in area); killdeer, 1; mourning dove, 32; yellow-shafted flicker, 1; pileated woodpecker, 2; red-headed woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 12; eastern phoebe, 4; Am. crow, 259; Carolina chickadee, 19; tufted titmouse, 22; white-breasted nuthatch, 1; brown creeper, 4; winter wren, 1; Carolina wren, 11; mockingbird, 8; hermit thrush, 5; eastern bluebird, 51; golden-crowned kinglet, 46; ruby-crowned kinglet, 1; loggerhead shrike, 5; starling, 331; myrtle warbler, 8; English sparrow, 10; eastern meadowlark, 34; cardinal, 52; Am. goldfinch, 5; slate-colored junco, 181; tree sparrow, 17; field sparrow, 45; white-throated sparrow, 7; fox sparrow, 1; swamp sparrow, 4; song sparrow, 59. **Total,** 42 species; 1308 individuals. — Gordon Lewis, Harry Lewis, Chas. E. Stevens, Jr.

128. Yorktown, Va. (Newport News Reservoir, Harwood's Mill Reservoir, Colonial Battlefield Park including Wormley Lake and waterfront of Yorktown, York River shore from Yorktown northeast to Felgaters Creek, lower part of Back Creek, and woods and marshes along Colonial National Monument Parkway and on the York-Poquoson Rivers peninsula; open farmland 9%, pine woodland 24%, deciduous woodland 15%, bushy fields 9%, bayberry tangles 3%, marshes and open water 40%). — Dec. 26; 6:45 a.m. to 5:15 p.m. Partly cloudy; temp. 29° to 50° F.; wind SSW, 13-18 m.p.h.; ground covered with 1½-in. snow; still water 10% frozen. Two observers frequently separating. Total hours, 10 (on foot); total miles, 6 (on foot). Horned grebe, 26; pied-billed grebe, 2;

double-crested cormorant, 1; great blue heron, 6; Canada goose, 141; black duck, 37; gadwall, 38; baldpate, 256; pintail, 5; ring-necked duck, 199; canvas-back, 138; scaup duck (sp.), 168; Am. golden-eye, 31; buffle-head, 50; ruddy duck, 534; hooded merganser, 42; Am. merganser, 10; turkey vulture, 44; black vulture, 15; Cooper's hawk, 1; red-tailed hawk, 2; bald eagle, 1; sparrow hawk, 2; Am. coot, 2; killdeer, 9; herring gull, 55; ring-billed gull, 89; Bonaparte's gull, 60; mourning dove, 1; belted kingfisher, 5; yellow-shafted flicker, 8; red-bellied woodpecker, 1; yellow-bellied sapsucker, 1; hairy woodpecker, 1; downy woodpecker, 9; eastern phoebe, 1; blue jay, 2; Am. crow, 36; Carolina chickadee, 17; tufted titmouse, 20; brown creeper, 5; winter wren, 1; Carolina wren, 29; mockingbird, 9; hermit thrush, 10; eastern bluebird, 20; golden-crowned kinglet, 27; ruby-crowned kinglet, 1; starling, 81; myrtle warbler, 283; English sparrow, 29; eastern meadowlark, 40; red-wing, 3; cowbird, 2; cardinal, 21; Am. goldfinch, 35; eastern towhee, 36; slate-colored junco, 236; field sparrow, 37; white-throated sparrow, 226; fox sparrow, 52; swamp sparrow, 1; song sparrow, 42. **Total,** 63 species; approximately 3292 individuals. — F. R. Scott, C. E. Stevens, Jr.

129. Asheville, N. C. (area less than in last 2 years, but limits and topography the same; from Beaver Lake south to Roscraggon, and from Dry-man Mt. east to Bee Tree Road; open farmland 15%, town suburbs 35%, pine woodland 15%, deciduous woodland 10%, pine and deciduous woodland 10%, lake and stream banks 14%, marsh 1%). — Dec. 27; 8:00 a.m. to 5:30 p.m. Clear, sunny; temp. 48° to 27° F.; wind N, 7 m.p.h.; ground partly covered with snow which fell Dec. 25. Thirty-two observers. Total hours, 69; total miles, 148 (54 on foot, 94 in cars). Pied-billed grebe, 1; red-tailed hawk, 3; red-shouldered hawk, 1; pigeon hawk, 1; sparrow hawk, 2; bob-white, 6; barred owl, 1; belted kingfisher, 2; yellow-shafted flicker, 5; red-headed woodpecker, 1; yellow-bellied sapsucker, 1; hairy woodpecker, 3; downy woodpecker, 26; eastern phoebe, 5; blue jay, 51; Am. crow, 60; Carolina chickadee, 155; tufted titmouse, 136; white-breasted nuthatch, 48; brown creeper, 2; house wren, 1; winter wren, 1; Carolina wren, 35; mockingbird, 3; catbird, 2 (L. J.); brown thrasher, 1; robin, 6; hermit thrush, 1; eastern bluebird, 64; golden-crowned kinglet, 34; ruby-crowned kinglet, 8; cedar waxwing, 19; starling, 184; myrtle warbler, 3; English sparrow, 372; eastern meadowlark, 55; purple grackle, 3; cardinal, 80; Am. goldfinch, 25; eastern towhee, 64; slate-colored junco, 182; chipping sparrow, 5; field sparrow, 43; white-throated sparrow, 107; song sparrow, 71. **Total,** 45 species; 1879 individuals. — Walter S. Adams, Esther Bennett, Esther Bloxton, Elizabeth Collins, Margaret Decker, E. Annette Hinds, Bobby Hoch, Louise Ingersoll, Leland J. Jones, Ben Jones, Mrs. Reed Kitchin, Paul T. Knollman, Mrs. Lucinda Lacy, Arthur Lawrence, Harry Lytle, Eileen McCabe, Mrs. J. N. McCabe, Nicholas McCabe, Jr., Sheila McCabe, Clayton McCracken, Mrs. M. F. Meredith, Jack Mulvaney, Frank Rembert, R. H. Rembert, Mrs. Kenley Richbourg, Bobby Ruiz, Eleanor Shaffle, Louise Tannahill, Mrs. W. H. Thorn, Mrs. Eugene Ward, Mrs. Annabel Worrell, Mr. T. L. Young. [Wood pewee eliminated from list on insufficient evidence — Ed.]

130. Brevard, N. C. (5-mile radius including Forest Hills, Hunter Farm, French Broad River Valley, Sugar Loaf Mountain; same area as in 1938; open farmland 40%, meadows, orchards and pastures 30%, deciduous woodlands 15%, shrubby thickets 15%). — Dec. 28; 8 a.m. to 5 p.m. Fair; temp. 25° to 40° F.; wind variable, 1-7 m.p.h.; ground covered with 4-day-old snow, partially melted on sunny slopes and meadows, 2-4 in. deep in woods and shaded areas. Observers together. Total hours, 9 (on foot); total miles, 8 (on foot). Cooper's hawk, 1; sparrow hawk, 1; yellow-shafted flicker, 1; downy woodpecker, 2; eastern phoebe, 4; blue jay, 14; Am. crow, 14; Carolina chickadee, 22; tufted titmouse, 19; brown creeper, 2; Carolina wren, 15; mockingbird, 2; brown thrasher, 1; robin, 1; hermit thrush, 3; eastern bluebird, 10; English sparrow, 15; cardinal, 18; purple finch, 1; Am. goldfinch, 13; eastern towhee, 17; slate-colored junco, 58; field sparrow, 22; white-throated sparrow, 53; fox sparrow, 2; song sparrow, 47. **Total,** 26 species; 358 individuals. (Seen in area Dec. 22: bob-white, 7.) — Rachael Orr Schepkowski, Oliver Orr.

131. Chapel Hill, N. C. (same area as in last 18 years; oak-hickory woods 15%, pine woods 10%, lowland thickets and farmlands 55%, marsh and lake shores 20%). — Dec. 23; dawn to dusk. Broken strato-cumulus becoming clear; temp. 31° to 58° F.; wind W, 5-10 m.p.h. Four observers in a.m., 2 in p.m., all working separately. Total miles, 20 (on foot); total hours, 22 (on foot). Horned grebe, 1; pied-billed grebe, 2; great blue heron, 2; mallard, 4; black duck, 56; gadwall, 5; redhead, 1; ring-necked duck, 74; buffle-head, 19; ruddy duck, 5; turkey vulture, 66; black vulture, 18; Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 3; marsh hawk, 1; sparrow hawk, 7; bob-white, 25; coot, 15; killdeer, 22; Wilson's snipe, 1; mourning dove, 102; barred owl, 2; yellow-shafted flicker, 23; red-bellied woodpecker, 8; red-headed woodpecker, 6; yellow-bellied sapsucker, 6; hairy woodpecker, 9; downy woodpecker, 20; phoebe, 13; blue jay, 49; Am. crow, 29; Carolina chickadee, 24; tufted titmouse, 19; white-breasted nuthatch, 8; brown-headed nuthatch, 20; brown creeper, 7; winter wren, 2; Carolina wren, 48; mockingbird, 10; brown thrasher, 1; robin, 76; hermit thrush, 34; eastern bluebird, 73; golden-crowned kinglet, 20; ruby-crowned kinglet, 7; Am. pipit, 1; cedar waxwing, 52; loggerhead shrike, 2; starling, 9; myrtle

warbler, 12; pine warbler, 1; English sparrow, 12; eastern meadowlark, 117; red-wing, 405; rusty blackbird, 41; cardinal, 130; purple finch, 3; pine siskin, 2; Am. goldfinch, 32; eastern towhee, 23; Savannah sparrow, 14; pine-woods sparrow, 2 (seen at 20 yards and heard singing — P. R.); slate-colored junco, 130; field sparrow, 44; white-throated sparrow, 441; fox sparrow, 16; swamp sparrow, 22; song sparrow, 166. **Total,** 69 species; 2623 individuals. — Joe Jones, Thomas Odum, Virginia Odum, Phillips Russell.

132. Charlotte, N. C. (3 areas: 1 same as last five years, vicinity of Lucas estate, around head-waters of McAlpine Creek; 1 same as last year, pond 2 miles east of city just off of Albemarle highway; 1 new area, northeast of city, vicinity of Hayes Nursery and cemetery; pine, gum, poplar woodlands 55%, cleared land 15%, cultivated nursery and open cemetery 20%, hedgerows and pond 10%). — Dec. 27; 7:30 a.m. to 4:00 p.m. Clear; wind 1-7 m.p.h.; temp. 29° to 53°. Eleven observers in 3 parties. Total hours, 12½ (11 on foot); total miles, 40 (14 on foot, 26 by car). Pied-billed grebe, 1; buffle-head, 6; turkey vulture, 8; black vulture, 2; sharp-shinned hawk, 1; red-shouldered hawk, 1; marsh hawk, 2; bob-white, 15; Wilson's snipe, 3; yellow-shafted flicker, 8; red-bellied woodpecker, 1; yellow-bellied sapsucker, 2; downy woodpecker, 2; blue jay, 22; Am. crow, 80; Carolina chickadee, 19; tufted titmouse, 2; brown creeper, 2; Carolina wren, 10; mockingbird, 19; brown thrasher, 4; robin, 1; hermit thrush, 1; eastern bluebird, 25; golden-crowned kinglet, 2; ruby-crowned kinglet, 4; cedar waxwing, 8; loggerhead shrike, 4; starling, 120 (est.); myrtle warbler, 3; pine warbler, 2; palm warbler, 5; English sparrow, 15; eastern meadowlark, 29; cardinal, 15; eastern towhee, 7; Savannah sparrow, 15; slate-colored junco, 117 (est.); field sparrow, 13; white-throated sparrow, 62; swamp sparrow, 2; song sparrow, 11. **Total,** 42 species; approximately 671 individuals. The palm warblers recorded on the count were watched at close range (up to 15 feet) on Dec. 23, 25, 27 and 29; eye lines were definitely whitish, yellow on body not bright. Therefore believed to be western palm — B. R. C., E. M.). (Seen in same area: horned grebe, 1 (male collected on Dec. 25 contained 3½-inch bass); bald eagle, 1 ad. (Northrup); mourning dove, 15; eastern phoebe, 1.) — B. R. Chamberlain, Norman Chamberlain, Kitty Constable, Jack F. Dermid, Victor Dermid, Anne Locke, Brem Mayer, Ernest Mitchell, Betty Pleasant, Mrs. George Potter, Jimmy Potter (Mecklenburg Audubon Club).

133. Greensboro, N. C. (approximately same region as in past several years; deciduous and mixed woodlands 25%, open fields and golf courses 30%, cattail marsh and thickets 15%, small fresh water lakes 20%, city yards, campuses and parkways 10%). — Dec. 27; 7 a.m. to 5:30 p.m. Clear; temp. 29° to 49°; light snow on ground, small ponds partially frozen. Twenty-one observers mostly in 7 parties. Total hours, 57; total miles, 78 (38 on foot, 40 by car). Pied-billed grebe, 1; double-crested cormorant, 1; great blue heron, 4; Canada goose, 18; mallard, 22; black duck, 35; buffle-head, 5; hooded merganser, 6; Am. merganser, 9; turkey vulture, 125; black vulture, 41; sharp-shinned hawk, 3; Cooper's hawk, 4; red-tailed hawk, 1; red-shouldered hawk, 5; sparrow hawk, 3; bob-white, 17; killdeer, 10; mourning dove, 46; screech owl, 2; barred owl, 2; belted kingfisher, 2; yellow-shafted flicker, 34; red-bellied woodpecker, 3; red-headed woodpecker, 4; yellow-bellied sapsucker, 10; hairy woodpecker, 10; downy woodpecker, 29; eastern phoebe, 8; horned lark, 27; blue jay, 60; Am. crow, 235; Carolina chickadee, 116; tufted titmouse, 74; white-breasted nuthatch, 23; red-breasted nuthatch, 12; brown-headed nuthatch, 9; brown creeper, 14; winter wren, 3; Carolina wren, 31; mockingbird, 57; brown thrasher, 2; robin, 7; hermit thrush, 11; eastern bluebird, 255; golden-crowned kinglet, 76; ruby-crowned kinglet, 20; cedar waxwing, 30; loggerhead shrike, 14; starling, 3135 (est.); myrtle warbler, 6; pine warbler, 8; English sparrow, 139; eastern meadowlark, 63; red-wing, 111; purple grackle, 6; cowbird, 3; cardinal, 97; pine siskin, 15; Am. goldfinch, 88; eastern towhee, 38; vesper sparrow, 1; slate-colored junco, 727; chipping sparrow, 2; field sparrow, 141; white-throated sparrow, 341; fox sparrow, 4; swamp sparrow, 12; song sparrow, 228. **Total,** 69 species; approximately 6702 individuals. — Harry Bryant, Mrs. W. C. Carr, Inez Coldwell, Bill Craft, Mrs. F. H. Craft, Larry Crawford, Alan Hamm, Douglas Haislip, Ethel McNairy, Dr. and Mrs. Franklin McNutt, Hugh Medford, Hugh Medford, Jr., Oscar Paris, Etta Schiffman, Mrs. Edith Settan, Mrs. R. E. Settan, Dr. Archie D. Shaftesbury, George A. Smith, Dr. Wesley Taylor, Thatcher Townsend (members and guests, Piedmont Bird Club).

134. Mt. Olive, N. C. (Wooten, Williams, and Brandon farms; open fields 50%, pine woods 10%, mixed pine and deciduous woods 35%, small ponds 5%). — Dec. 23; dawn to dusk. Fair to partly cloudy; temp. 38° to 54°; light wind. Three observers in 2 parties. Total hours, 16; total miles, 33 (15 on foot, 18 by car). Pied-billed grebe, 4; wood duck, 10; turkey vulture, 10; black vulture, 9; Cooper's hawk, 2; red-shouldered hawk, 4; marsh hawk, 2; sparrow hawk, 5; bob-white, 35; killdeer, 23; Wilson's snipe, 1; belted kingfisher, 3; yellow-shafted flicker, 16; red-bellied woodpecker, 7; red-headed woodpecker, 2; yellow-bellied sapsucker, 5; hairy woodpecker, 2; downy woodpecker, 8; eastern phoebe, 8; blue jay, 17; Am. crow, 28; Carolina chickadee, 13; tufted titmouse, 10; white-breasted nuthatch, 6; brown-headed nuthatch, 11; brown creeper, 5; house wren, 2; winter wren, 5; Carolina wren, 19; mockingbird, 20; catbird, 3; brown thrasher, 7; robin, 70 (partly est.); hermit thrush, 21; eastern bluebird, 31;

golden-crowned kinglet, 26; ruby-crowned kinglet, 25; Am. pipit, 19; cedar waxwing, 43; loggerhead shrike, 16; starling, 225 (est.); white-eyed vireo, 1 (yellow spectacles, white throat, and wing bars, observed at very close range — B. H. III); blue-headed vireo, 1 (white spectacles, gray-blue head, and thick vireo bill — B. H. III); myrtle warbler, 282 (partly est.); pine warbler, 1; palm warbler, 1; yellow-throat, 3; English sparrow, 243 (partly est.); eastern meadowlark, 98; red-wing, 158 (est.); rusty blackbird, 11; cowbird, 12; cardinal, 21; purple finch, 12; Am. goldfinch, 66; eastern towhee, 25; Savannah sparrow, 37; vesper sparrow, 1; slate-colored junco, 64 (est.); chipping sparrow, 43; field sparrow, 45; white-throated sparrow, 136 (est.); fox sparrow, 7; swamp sparrow, 12; song sparrow, 91 (est.). **Total,** 65 species; approximately 2149 individuals. — Miss Elizabeth Oliver, William C. Davis, Bob Holmes, III.

135. New Holland, N. C. (same area as 1940 and subsequent counts; Mattamuskeet National Wildlife Refuge and adjacent woods and fields, including public road across the lake; marsh 30%, open water 40%, fields and thickets 20%, pine and cypress woods 10%). — Dec. 21; 7:11 a.m. to 4:55 p.m. Clear to partly overcast; temp. 28° to 45° F.; wind N to NE; ground bare. Six observers, mostly together. Total hours, 10; total miles, 32 (25 by car, 7 by foot). Pied-billed grebe, 7; great blue heron, 5; Am. egret, 18; little blue heron, 2; black-crowned night heron, 1; whistling swan, 5000; Canada goose, 15,000; blue goose, 1; mallard, 45; black duck, 250; baldpate, 1; pintail, 1000; green-winged teal, 3; scaup duck [sp.], 3; ruddy duck, 5; turkey vulture, 16; black vulture, 5; red-shouldered hawk, 2; Am. rough-legged hawk, 1; bald eagle, 10; marsh hawk, 5; sparrow hawk, 5; sharp-shinned hawk, 3; bob-white, 6; king rail, 1; Am. coot, 14; Wilson's snipe, 7; yellow-legs [sp.], 7; herring gull, 5; gull-billed tern, 2; mourning dove, 14; belted kingfisher, 1; yellow-shafted flicker, 3; red-bellied woodpecker, 2; hairy woodpecker, 1; downy woodpecker, 4; eastern phoebe, 2; Am. crow, 56; fish crow, 3; Carolina chickadee, 5; Carolina wren, 5; short-billed marsh wren, 1; mockingbird, 4; catbird, 4; brown thrasher, 1; robin, 1; blue-gray gnatcatcher, 1; golden-crowned kinglet, 125; starling, 3; myrtle warbler, 2000; yellow-throated warbler, 1; English sparrow, 13; eastern meadowlark, 85; purple grackle, 75; cardinal, 10; red-wing, 6227; eastern towhee, 3; field sparrow, 25; white-throated sparrow, 15; fox sparrow, 1; song sparrow, 21. **Total,** 61 species; approximately 30,142 individuals. The larger flocks of birds were estimated. — R. L. Wolfe, Joe West, James Fairies, Renato Cubenas, Willie G. Cahoon, Joe G. Adams.

136. Pea Island and Oregon Inlet, Dare Co., N. C. (open water 50%, salt marsh, ponds and shore 30%, sand dunes mostly covered with high grass and few myrtle bushes 20%). — Dec. 20. Clear; temp. 45° to 60°; wind NE, stiff. Five observers together. Total hours, 10 (on foot and truck); total miles, 40 (35 on truck, 5 on foot). Horned grebe, 3; pied-billed grebe, 21; gannet, 3000 (est.); double-crested cormorant, 8; great blue heron, 6; Louisiana heron, 2; little blue heron, 1; Am. bittern, 4; whistling swan, 65; Canada goose, 10,000 (est.); snow goose, 7000 (est.); blue goose, 1; mallard, 4; gadwall, 15; baldpate, 3; pintail, 1000 (est.); green-winged teal, 225; shoveller, 40; black duck, 1200 (est.); buffle-head, 250 (est.); surf scoter, 1; red-breasted merganser, 26; marsh hawk, 15; duck hawk 1; pigeon hawk, 1; sparrow hawk, 4; bald eagle, 18; Am. coot, 60; killdeer, 1; solitary sandpiper, 1; avocet, 2; greater yellow-legs, 15; red-backed sandpiper, 38; great black-backed gull, 35; herring gull, 1200; Bonaparte's gull, 60; royal tern, 1; long-billed marsh wren, 1; robin, 55; golden-crowned kinglet, 1; myrtle warbler, 500 (est.); eastern meadowlark, 150; red-wing, 85; purple grackle, 30; seaside sparrow, 5; vesper sparrow, 2; field sparrow, 26; fox sparrow, 1; song sparrow, 21. **Total,** 49 species; approximately 25,204 individuals. (On Dec. 19, 1 Wilson's snipe was seen on Bodie Island; tree swallows were seen 15 miles further north on Bodie Island. About 3500 Bonaparte's gulls were on Albemarle Sound between Skinnersville and Edenton.) — Paul Sturm, (Pea Island Refuge Mgr.), Joe West, James Fairies, Renato Cubenas, R. L. Wolff.

137. Raleigh, N. C. (practically same area as previous counts; lakes and small ponds 40%, mixed pine and deciduous woodland 15%, deciduous woodland 10%, open fields 10% [total 75% — Ed.] — Dec. 22; 7:30 a.m. to 5:30 p.m. Clear all day; mostly calm; temp. 32° to 60° F.; ground bare, water open except in sheltered places. Fifteen observers in 6 parties. Total hours, 31 (27 on foot, 4 by car); total miles, 35 (27 on foot, 8 by car). Horned grebe, 1; pied-billed grebe, 5; great blue heron, 1; whistling swan, 4; mallard, 4; black duck, 2; gadwall, 2; shoveller, 2; ring-necked duck, 45; lesser scaup duck, 12; Am. golden-eye, 1; buffle-head, 1; ruddy duck, 2; hooded merganser, 6; turkey vulture, 9; black vulture, 12; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 6; red-shouldered hawk, 2; marsh hawk, 2; osprey, 1; sparrow hawk, 4; bob-white, 13; Am. coot, 2; killdeer, 10; gull (sp.), 2; mourning dove, 15; screech owl, 1; horned owl, 1; belted kingfisher, 9; yellow-shafted flicker, 14; red-bellied woodpecker, 7; red-headed woodpecker, 9; yellow-bellied sapsucker, 3; hairy woodpecker, 5; downy woodpecker, 10; eastern phoebe, 4; blue jay, 49; Am. crow, 15; Carolina chickadee, 64; tufted titmouse, 22; white-breasted nuthatch, 4; red-breasted nuthatch, 1; brown-headed nuthatch, 6; brown creeper, 5; winter wren, 3; Carolina wren, 45; mockingbird, 32; brown thrasher, 5; robin, 16; hermit thrush, 8; eastern bluebird, 48; golden-crowned kinglet, 11; ruby-crowned kinglet, 19; Am. pipit, 50; loggerhead shrike, 14; starling, 280; pine

warbler, 14; oven-bird, 1 (heard and seen — P. D.) [no further substantiating details — Ed.]; English sparrow, 55; eastern meadowlark, 38; red-wing, 10; cowbird, 40; cardinal, 14; purple finch, 20; Am. goldfinch, 57; eastern towhee, 53; Savannah sparrow, 65; grasshopper sparrow, 1 (collected — T. L. Q.); vesper sparrow, 2; slate-colored junco, 525; field sparrow, 153; white-throated sparrow, 290; fox sparrow, 8; swamp sparrow, 20; song sparrow, 295. **Total,** 77 species; 2589 individuals — D. L. Wray, Robt. Overing, Mrs. C. H. Green, C. H. Bostian, F. B. Meacham, E. W. Winkler and sons, Virginia Pickelle, Philip Davis, T. L. Quay, Sandy McCulloch, Jo Ann Meacham, Gene Bostian, John David Wray.

138. Wilmington District (New Hanover and Brunswick Cos.), N. C. (same area as previous years, except for shift eastward to include Big Island and Orton Plantation; mixed pine and deciduous woodland 60%, pasture 5%, fresh water ponds and river 20%, beach and salt marsh 15%). — Dec. 27; dawn to dusk. Clear; temp. 32° to 52°; wind WNW to WSW, 11-18 m.p.h.; ground bare, water open. Twenty-three observers in 7 parties (5 additional observers for 2 hours in p.m.). Total hours, 55 (44 on foot, 11 in cars); total miles, 87 (49 on foot, 38 by car). Common loon, 24; horned grebe, 32; pied-billed grebe, 42; brown pelican, 2; double-crested cormorant, 2; great blue heron, 3; Am. egret, 15; snowy egret, 2; Louisiana heron, 27; little blue heron, 6; green heron, 1; black-crowned night heron, 26; Canada goose, 400 (est.); mallard, 20; black duck, 19; baldpate, 35; pintail, 3; green-winged teal, 3; shoveller, 2; ring-necked duck, 44; scaup duck [sp.], 21; Am. golden-eye, 1; bufflehead, 5; ruddy duck, 4; hooded merganser, 20; red-breasted merganser, 32; turkey vulture, 23; black vulture, 6; sharp-shinned hawk, 1; Cooper's hawk, 4; red-tailed hawk, 3; red-shouldered hawk, 6; bald eagle, 6; marsh hawk, 2; osprey, 1; sparrow hawk, 11; bob-white, 8; clapper rail, 4; Virginia rail, 3; Am. coot, 75; killdeer, 21; black-bellied plover, 5; Wilson's snipe, 2; willet, 1; least sandpiper, 1; red-backed sandpiper, 3; semipalmated sandpiper, 6; sanderling, 10; herring gull, 500 (est.); ring-billed gull, 100 (est.); Bonaparte's gull, 25; Forster's tern, 23; royal tern, 2; Caspian tern, 8; mourning dove, 8; belted kingfisher, 11; yellow-shafted flicker, 46; red-bellied woodpecker, 3; red-headed woodpecker, 11; yellow-bellied sapsucker, 3; hairy woodpecker, 3; downy woodpecker, 12; eastern phoebe, 6; tree swallow, 25; blue jay, 70; Am. crow, 75; fish crow, 2; Carolina chickadee, 175; tufted titmouse, 69; red-breasted nuthatch, 4; brown-headed nuthatch, 76; brown creeper, 3; house wren, 12; winter wren, 12; Carolina wren, 56; short-billed marsh wren, 4; mockingbird, 45; catbird, 14; brown thrasher, 6; robin, 53; hermit thrush, 15; eastern bluebird, 63; blue-gray gnatcatcher, 8; golden-crowned kinglet, 21; ruby-crowned kinglet, 53; Am. pipit, 40; cedar waxwing, 9; loggerhead shrike, 11; starling, 130; solitary vireo, 4; myrtle warbler, 400 (est.); pine warbler, 225 (est.); palm warbler, 12; yellow-throat, 4; English sparrow, 500 (est.); eastern meadowlark, 102; red-wing, 1000 (est.); boat-tailed grackle, 23; purple grackle, 3; cowbird, 1; cardinal, 37; purple finch, 52; Am. goldfinch, 10; eastern towhee, 66; Savannah sparrow, 36; Henslow's sparrow, 2 (J. T., P. M.); seaside sparrow, 1; pine-woods sparrow, 2; slate-colored junco, 700 (est.); chipping sparrow, 400 (est.); field sparrow, 37; white-throated sparrow, 450 (est.); fox sparrow, 90; swamp sparrow, 11; song sparrow, 70. (Seen on Dec. 28: red-cockaded woodpecker, 1.) **Total,** 115 species; approximately 7043 individuals. — Mrs. Sibbel Turnbull, Tancil Horne, Cecil Appleberry, Jim Smith, Steve Smith, Barty Martin, Bill Ruffin, John Funderburg, Ruth Ioman, Roy Baker, Emma Lossen, Charles Peschau, Leona Carroll, Julia Theobald, Mrs. H. E. Lane, Polly Meband, John Trott, Mrs. Howard J. Smith, Charles Theobald, Mrs. Will Rehder, Mrs. Boyd Quarles, Mrs. C. D. Maffitt, Claude McAllister, John Carr, Don McAllister, Sandy McCulloch, Kenneth Sprunt, Edna Appleberry.

139. Windom, N. C. (farms of L. H. Hutchins, Mack Silver, Mrs. C. P. Gibson, and adjacent territory; open farm land 50%, white pine woodland 2%, pastures 18%, deciduous forests 30%). — Dec. 20; 8 to 12 a.m., 1 to 5 p.m. Partly cloudy in a.m., clear but hazy in p.m.; temp. 22° to 55°; wind, 5 m.p.h. Four observers in 2 parties. Total hours, 16; total miles, 20 (on foot). Cooper's hawk, 1; killdeer, 10; Wilson's snipe, 2; downy woodpecker, 2; blue jay, 2; Am. crow, 35; chickadee [sp.], 3; tufted titmouse, 3; Carolina wren, 10; mockingbird, 2; eastern bluebird, 10; English sparrow, 83; eastern meadowlark, 1; cardinal, 22; eastern towhee, 3; slate-colored junco, 43; field sparrow, 45; white-throated sparrow, 9; fox sparrow, 11; song sparrow, 78. **Total,** 20 species; 375 individuals. (On account of unfavorable weather most birds stirred very little.) — Roosevelt Hughes, Paul Hughes, Brook Boone, James Hutchins.

140. Winston-Salem, N. C. (area included city, city watershed, Reynolda, and Yadkin River; pasture land 5%, oak-hickory forest 20%, pine forest 5%, lakes and river 50%. [total 80% — Ed.] — Dec. 26; 7:00 a.m. to 5:30 p.m. Fair, temp. 27° to 46°; high wind in p.m.; 3-in. snow of previous day covered ground, but mostly melted by p.m. in sunny areas. Total hours, 20; total miles, 87 (32 on foot, 55 by car). Canada goose, 2; mallard, 44; black duck, 24; ring-necked duck, 28; turkey vulture, 20; black vulture, 2; Cooper's hawk, 1; marsh hawk, 1; sparrow hawk, 1; bob-white, 22; killdeer, 2; mourning dove, 12; screech owl, 1; yellow-shafted flicker, 7; red-bellied woodpecker, 2; red-headed woodpecker, 3; yellow-bellied sapsucker, 3; downy woodpecker, 5; eastern phoebe, 4; horned lark, 1;

blue jay, 23; Am. crow, 41; Carolina chickadee, 24; tufted titmouse, 18; white-breasted nuthatch, 7; brown creeper, 1; winter wren, 1; Carolina wren, 12; mockingbird, 6; robin, 3; hermit thrush, 4; bluebird, 28; golden-crowned kinglet, 23; ruby-crowned kinglet, 5; loggerhead shrike, 1; starling, 10,115 (10,000 est. came to roost at Graylyn, Reynolda); myrtle warbler, 4; pine warbler, 1; English sparrow, 68; eastern meadowlark, 154; purple grackle, 1069 (1000 est. came to roost at Graylyn, Reynolda); cardinal, 38; Am. goldfinch, 54; eastern towhee, 21; slate-colored junco, 197; field sparrow, 113; white-throated sparrow, 105; fox sparrow, 7; song sparrow, 110. **Total,** 49 species; approximately 12,438 individuals. — James L. Stephenson, E. Wayne Irvin, William H. Chance, Rev. Douglas L. Rights, Burton J. Rights, Graham H. Rights, Henry S. Fishel, John Ted Tally, Henry M. Magie, Robert H. Witherington.

141. Charleston, S. C. (Bull's Island, adjacent waters and marshes, mainland opposite, back to Wando River, as in preceding years; farmland 20%, fresh-water ponds and wooded swamps 25%, woods, mixed and pine 25%, salt-water creeks, marshes and flats 25%, dunes and ocean front 5%). — Dec. 20; dawn to dusk. Clear in a.m., overcast in p.m.; temp. 42° to 59° F.; wind (mainly in p.m.) NE, 5-10 m.p.h.; much water in woods; light frost. Eighteen observers in 4 parties (additional observer in a.m.). Total hours, 32 (24 on foot, 5 by car, 3 on boats); total miles, 96 (27 on foot, 62 by car, 7 on boats). Common loon, 3; red-throated loon, 3; horned grebe, 21; pied-billed grebe, 5; gannet, 4 (adults); double-crested cormorant, 26; water-turkey, 1; great blue heron, 29; Am. egret, 1; snowy egret, 5; Louisiana heron, 9; little blue heron, 5; mallard, 179; black duck, 167; gadwall, 219; baldpate, 20; pintail, 70; green-winged teal, 113; blue-winged teal, 42; shoveller, 15; redhead, 4; ring-necked duck, 404; canvas-back, 70; scaup duck [sp.], 10; Am. golden-eye, 1; buffle-head, 35; old-squaw, 1; Am. scoter, 11; ruddy duck, 23; hooded merganser, 15; red-breasted merganser, 59; turkey vulture, 40; black vulture, 15; Cooper's hawk, 3; red-tailed hawk, 4; red-shouldered hawk, 18; bald eagle, 9; marsh hawk, 10; pigeon hawk, 2; sparrow hawk, 4; wild turkey, 2; clapper rail, 20; Virginia rail, 1; Florida gallinule, 10; Am. coot, 574; oyster-catcher, 123; semipalmated plover, 3; killdeer, 7; black-bellied plover, 33; ruddy turnstone, 3; Wilson's snipe, 13; long-billed curlew, 1 (E.B.C., A.S. Jr., *et al.* — in area for 2 weeks or more); spotted sandpiper, 1; willet, 44; greater yellow-legs, 4; lesser yellow-legs, 2; red-backed sandpiper, 24; dowitcher, 16; semipalmated sandpiper, 6; marbled godwit, 19; sanderling, 24; herring gull, 111; ring-billed gull, 25; laughing gull, 15; Forster's tern, 22; Caspian tern, 54; mourning dove, 248; belted kingfisher, 1; yellow-shafted flicker, 29; pileated woodpecker, 26; red-bellied woodpecker, 35; yellow-bellied sapsucker, 12; hairy woodpecker, 10; downy woodpecker, 18; red-cockaded woodpecker, 12; eastern phoebe, 19; tree swallow, 51; blue jay, 19; Am. crow, 142; fish crow, 104; Carolina chickadee, 48; tufted titmouse, 34; white-breasted nuthatch, 4; brown-headed nuthatch, 30; brown creeper, 3; house wren, 20; winter wren, 4; Carolina wren, 23; long-billed marsh wren, 2; short-billed marsh wren, 7; mockingbird, 17; catbird, 4; brown thrasher, 11; robin, 717; hermit thrush, 18; eastern bluebird, 60; blue-gray gnatcatcher, 1; golden-crowned kinglet, 33; ruby-crowned kinglet, 114; Am. pipit, 189; cedar waxwing, 56; loggerhead shrike, 9; starling, 2; solitary vireo, 3; orange-crowned warbler, 1; myrtle warbler, 475+; yellow-throated warbler, 1; pine warbler, 45; palm warbler, 19 (western, 17; yellow, 2 — G. R. *et al.*); yellow-throat, 8; English sparrow, 2; eastern meadowlark, 162; red-wing, 601; rusty blackbird, 1; boat-tailed grackle, 10; purple grackle, 11; cardinal, 52; purple finch, 2; Am. goldfinch, 44; white-winged crossbill, 1 (first noted in top of pecan tree, bird was squeaked down close to N. H. S., who noted crossed bill, white wing-bars, and notched tail; first report for South Carolina, and hence placed on hypothetical list — E. B.C.); eastern towhee, 101 (red-eyed, 94; white-eyed, 7); Ipswich sparrow, 2; Savannah sparrow, 32; Henslow's sparrow, 1; sharp-tailed sparrow, 1; sea-side sparrow, 4; vesper sparrow, 7; slate-colored junco, 79; chipping sparrow, 28; field sparrow, 67; white-throated sparrow, 246; fox sparrow, 7; swamp sparrow, 66; song sparrow, 65. **Total,** 134 species (2 additional subspecies); 7096 individuals. A number of shorebirds were missed owing to unfavorable tidal conditions. — E. B. Chamberlain, E. B. Chamberlain, Jr., Harold Guerard, Jr., Bob Holmes III, M. L. McCrae, E. O. Mellinger, I. S. H. Metcalf, James Mosimann, Harold Peters, Patsy Peters, James Pittman, George Rabb, James Roe, Newton H. Seebeck, Alexander Sprunt, Jr., Mrs. Alexander Sprunt, Jr., Alexander Sprunt IV, Thomas Uzzell, E. A. Williams.

142. Columbia, S. C. (7 miles west of Columbia, Hendrix's pond, Fisher's pond, Horse Shoe Lake, West Columbia, Cayce to point 3 miles east of center of town; urban territory 4%, deciduous woods 20%, pine woods 41%, lake shores 10%, broom fields 12%, cattail marsh 3%, cultivated fields 10%. — Dec. 26; 7:30 a.m. to dusk. Clear to cloudy changing to rain in p.m.; temp 32° to 50°; wind W, 1-7 m.p.h. Fourteen observers. Total miles, 35 (25 by auto, 10 on foot). Pied-billed grebe, 1; turkey vulture, 6; black vulture, 306; sparrow hawk, 2; Am. coot, 1; mourning dove, 4; yellow-shafted flicker, 3; red-bellied woodpecker, 1; yellow-bellied sapsucker, 1; eastern phoebe, 5; blue jay, 10; Am. crow, 6; Carolina chickadee, 20; tufted titmouse, 2; brown-headed nuthatch, 4; Carolina wren, 2; mockingbird, 4; brown thrasher, 3; robin, 12; hermit thrush, 1; eastern bluebird, 41; golden-

crowned kinglet, 3; ruby-crowned kinglet, 15; cedar waxwing, 50; loggerhead shrike, 1; starling, 217; myrtle warbler, 1; pine warbler, 18; English sparrow, 220; eastern meadowlark, 5; rusty blackbird, 14; cardinal, 8; eastern towhee, 11; slate-colored junco, 26; chipping sparrow, 6; field sparrow, 44; white-throated sparrow, 8; song sparrow, 7. **Total,** 38 species; 1089 individuals. Two hundred of the black vultures were seen at one time apparently going to roost; this is the largest flight of vultures ever seen by any of the observers present. — Mrs. G. E. Charles, Mrs. William Faver, Billy Faver, Miss Ann Faver, Billy Thomas, Spencer Meeks, Miss Fair Caldwell, J. C. Brown, Mrs. J. C. Brown, Mary Alice Brown, Mrs. Clyde Sisson, Fred Sample, Mrs. P. B. Hendrix, and Gilbert Bristow.

143. Spartanburg, S. C. (center of town to points 9 miles south and east; Ezell woods, Ligon estate, Duncan Park, Fairforest meadow, Zimmerman Lake; open farmlands 25%, town suburbs 20%, mixed woodlands 40%, fresh-water ponds and marshes 15%). — Dec. 21; dawn to dusk. Cloudy with light rain; temp. 32° to 54° F; wind NW, 2-18 m.p.h. Five observers in 2 parties; total miles, 25 (7 on foot, 18 by car). Pied-billed grebe, 5; mallard, 9; lesser scaup duck, 3; turkey vulture, 8; black vulture, 4; marsh hawk, 1; sparrow hawk, 1; killdeer, 28; Wilson's snipe, 7; mourning dove, 6; belted kingfisher, 1; yellow-shafted flicker, 18; red-bellied woodpecker, 1; red-headed woodpecker, 1; yellow-bellied sapsucker, 1; downy woodpecker, 4; eastern phoebe, 1; blue jay, 64; Am. crow, 25; Carolina chickadee, 19; tufted titmouse, 18; white-breasted nuthatch, 1; brown creeper, 2; Carolina wren, 13; mockingbird, 17; brown thrasher, 4; robin, 800+ (est., 3 unusually large flocks); hermit thrush, 6; eastern bluebird, 45; golden-crowned kinglet, 1; ruby-crowned kinglet, 17; Am. pipit, 20; cedar waxwing, 90; loggerhead shrike, 9; starling, 48; myrtle warbler, 3; pine warbler, 4; English sparrow, 22; eastern meadowlark, 3; Baltimore oriole, 1 (male in full plumage feeding in small dogwood tree, seen for 5 or more minutes within 10 feet — G. C., L. C., R. C.); purple grackle, 90; cardinal, 34; purple finch, 15; pine siskin, 1; Am. goldfinch, 34; eastern towhee, 23; slate-colored junco, 104; chipping sparrow, 10; field sparrow, 26; white-throated sparrow, 46; swamp sparrow, 2; song sparrow, 23. **Total,** 52 species; approximately 1739 individuals. — Gabriel Cannon, Louisa Carlisle, Ruth Crick, Mr. and Mrs. Arthur Ligon.

144. Atlanta, Ga. (Lake Phoebe, Decatur, East Lake, South River, City Reservoir and area between these points; residential 70%, mixed woods 15%, cultivated and abandoned fields 15%). — Dec. 28; 7:30 a.m. to 5:30 p.m. Fair; temp. 38° at start, 50° on return; wind 10 m.p.h. Thirteen observers in 7 parties. Total hours, 35½; total miles, 45 (19 on foot, 26 by car). Pied-billed grebe, 18; black duck, 3; gadwall, 1; blue-winged teal, 1; ring-necked duck, 1; red-breasted merganser, 1; turkey vulture, 135; black vulture, 45; sharp-shinned hawk, 2; Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 1; sparrow hawk, 3; Am. coot, 4; killdeer, 203; Wilson's snipe, 11; mourning dove, 22; belted kingfisher, 2; yellow-shafted flicker, 15; pileated woodpecker, 1; red-bellied woodpecker, 10; red-headed woodpecker, 8; yellow-bellied sapsucker, 3; hairy woodpecker, 3; downy woodpecker, 14; eastern phoebe, 8; horned lark, 30; blue jay, 163; Am. crow, 98; Carolina chickadee, 51; tufted titmouse, 41; white-breasted nuthatch, 22; brown-headed nuthatch, 36; brown creeper, 6; winter wren, 6; house wren, 1; Bewick's wren, 1; Carolina wren, 50; mockingbird, 49; brown thrasher, 13; robin, 4; hermit thrush, 2; bluebird, 103; golden-crowned kinglet, 38; ruby-crowned kinglet, 41; pipit, 57; cedar waxwing, 6; loggerhead shrike, 1; starling, 214; myrtle warbler, 16; pine warbler, 3; English sparrow, 29; eastern meadowlark, 100; red-wing, 53; grackle [sp.], 140 (est.); cardinal, 83; Am. goldfinch, 194; eastern towhee, 79; Savannah sparrow, 38; grasshopper sparrow, 1; slate-colored junco, 93; chipping sparrow, 104; field sparrow, 227; white-throated sparrow, 274; fox sparrow, 2; swamp sparrow, 67; song sparrow, 148. **Total,** 67 species; approximately 3202 individuals. (Seen in area, Dec. 20: great horned owl, 1; Dec. 21: horned grebe, 1; great blue heron, 1; redhead, 1; ruddy duck, 1; spotted sandpiper, 1; herring gull, 1; Dec. 24: woodcock, 1; Dec. 30: blue-headed vireo, 1.) — Glenn Bell, R. B. Belser, Jack Carusos, Ed. Collum, Tom Collum, Dick Giblin, Harry Greene, William W. Griffin, Branch Howe, James Major, Bob Pruitt, Ralph Ramsey, Henry Robert (Atlanta Bird Club).

145. Macon (Bibb Co.), Ga. (10-mile diameter, city water-works area, along Ocmulgee River to city limits, fish hatchery and swamp south of town; deciduous-woods riverbank 25%, wet pasture 20%, suburbs 20%, swamp and ponds 20%, open and burned fields 15%). — Dec. 26; 8:30 a.m. to 6:15 p.m. Clear; temp. 30° to 65°; wind, N, 0-10 m.p.h. Five observers mostly together. Total hours, 9 (on foot); total miles, 23 (13 on foot, 10 by car). Pied-billed grebe, 5; turkey vulture, 5; black vulture, 3; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 2; marsh hawk, 1; sparrow hawk, 1; bob-white, 6 (covey); killdeer, 31; mourning dove, 1; ground dove, 1; yellow-shafted flicker, 10; red-bellied woodpecker, 3; yellow-bellied sapsucker, 6; downy woodpecker, 1; eastern phoebe, 5; blue jay, 6; Am. crow, 12; Carolina chickadee, 2; tufted titmouse, 1; Carolina wren, 6; mockingbird, 11; brown thrasher, 3; hermit thrush, 4; eastern bluebird, 9; golden-crowned kinglet, 2; ruby-crowned kinglet, 16; cedar waxwing, 20; loggerhead shrike, 3; starling, 1; blue-headed vireo, 1; orange-crowned warbler, 1; myrtle warbler, 100 (est.); pine warbler,

9; palm warbler, 2; yellow-throat, 2; English sparrow, 5; eastern meadowlark, 34; red-wing, 9; rusty blackbird, 18; grackle, 3; cardinal, 30; pine siskin, 5; Am. goldfinch, 80; eastern towhee, 8; Savannah sparrow, 17; slate-colored junco, 60; chipping sparrow, 49; field sparrow, 128; white-throated sparrow, 20; fox sparrow, 2; song sparrow, 49. **Total,** 53 species; approximately 811 individuals. — H. Lewis Batts, Jr., L. Mounts, Jean M. Batts, H. Lewis Batts, F. W. Rehfeld.

146. Okefenokee National Wildlife Refuge, Folkston, Ga. (Camp Cornelia along boundary fence to Chesser Island then along public road to Cornhouse creek via the CCC camp site. North along the St. George and Folkston road to Trader's Hill junction; returning to Camp Cornelia via the CCC camp site; out Suwannee canal to Chesser Island prairie thence to Grand prairie via Seagrove, Stump and Burnnett's Lakes; returning along the west side of Chesser Island prairie to the canal. Center of 15-mile circle was Camp Cornelia; longleaf-slash pine and palmetto flatwoods 50%, farmlands 1%, oak hammock 1%, prairies 48%). — Dec. 26; 7 a.m. to 7 p.m. Clear in a.m., partly cloudy in p.m.; temp. 40° at start, 58° at return; wind W, 1-3 m.p.h. Total hours, 12 (5 on foot, 2 by car, 5 by motor and pole boats); total miles, 31 (2 on foot, 19 by car, 10 by motor and pole boats). Pied-billed grebe, 2; great blue heron, 3; Am. egret, 60; mallard, 127; black duck, 55; pintail, 12; wood duck, 40; ring-necked duck, 6; buffle-head, 1; ruddy duck, 8; turkey vulture, 90; black vulture, 20; sharp-shinned hawk 1; red-shouldered hawk, 3; sparrow hawk, 3; bob-white, 18 (1 covey); sandhill crane, 38; clapper rail, 1 (heard); Florida gallinule, 1; Am. coot, 142; killdeer, 10; Wilson's snipe, 3; mourning dove, 22; ground dove, 1; screech owl, 1 (heard); barred owl, 9 (heard); belted kingfisher, 4; yellow-shafted flicker, 1; pileated woodpecker, 5; red-bellied woodpecker, 7; yellow-bellied sapsucker, 2; hairy woodpecker, 2; downy woodpecker, 2; red-cockaded woodpecker, 6; eastern phoebe, 13; tree swallow, 110; blue jay, 2; Am. crow, 5; tufted titmouse, 6; brown-headed nuthatch, 9; house wren, 7; Bewick's wren, 1 (Chesser Is.); Carolina wren, 12; mockingbird, 10; catbird, 21; brown thrasher, 4; robin, 135; hermit thrush, 6; eastern bluebird, 11; golden-crowned kinglet, 1; ruby-crowned kinglet, 35; Am. pipit 300 (partly est.); white-eyed vireo, 1; blue-headed vireo, 3; orange-crowned warbler, 3; myrtle warbler, 190; pine warbler, 4; palm warbler (western), 5; yellow-throat, 20; eastern meadowlark, 34; red-wing, 280; grackle [sp.], 1; cowbird, 1; cardinal, 4; Am. goldfinch, 18; eastern towhee, 21 (red-eyed, 19; white-eyed, 2); Savannah sparrow, 5; vesper sparrow, 25; chipping sparrow, 225; field sparrow, 7; white-throated sparrow, 18; fox sparrow, 2; swamp sparrow, 14; song sparrow, 16. **Total,** 74 species (1 additional subspecies); approximately 2290 individuals. (Seen during the period: Cooper's hawk, 1; hooded merganser, 1; wild turkey, 5; Carolina chickadee, 4; brown creeper, 1; blue-gray gnatcatcher, 1.) — Raymond J. Fleetwood.

147. Sherwood and Birdsong Plantations (Grady Co.), Ga. (within 1500 acres; open fields and pastures 50%, pinelands and mixed hardwoods 30%, gum swamp and 5 ponds ranging in size from 1½ to 6 acres 20%). — Dec. 25; before dawn to after dusk. Driving, intermittent mist and heavily overcast in a.m., mostly cloudy with sun occasionally breaking through in p.m.; temp. 48° to 51°; wind N and NW, 0-25 m.p.h. Total hours, 12 (on foot); total miles, 14. Wood duck, 19; turkey vulture, 11; black vulture, 21; Cooper's hawk, 1; red-tailed hawk, 4; red-shouldered hawk, 4; marsh hawk, 2; sparrow hawk, 2; bob-white, 18 (1 covey); wild turkey, 59 (2 flocks and a lone bird); killdeer, 6; woodcock, 1 (going through mating performance); Wilson's snipe, 1; mourning dove, 4; ground dove, 3; screech owl, 1; horned owl, 5; barred owl, 6; belted kingfisher, 2; yellow-shafted flicker, 12; pileated woodpecker, 4; red-bellied woodpecker, 13; yellow-bellied sapsucker, 5; downy woodpecker, 6; red-cockaded woodpecker, 2; eastern phoebe, 5; blue jay, 15; Am. crow, 28; Carolina chickadee, 6; tufted titmouse, 11; white-breasted nuthatch, 4; brown-headed nuthatch, 5; house wren, 7; winter wren, 1; Carolina wren, 9; mockingbird, 9; catbird, 2; brown thrasher, 12; robin, 10,000 (est.); hermit thrush, 2; eastern bluebird, 30; golden-crowned kinglet, 1; ruby-crowned kinglet, 43; loggerhead shrike, 1; starling, 200; black and white warbler, 4; parula warbler, 1 (observed at 6 feet, the first winter record); myrtle warbler, 22; pine warbler, 45; palm warbler, 9; yellow-throat, 3; meadowlark, 30; red-wing, 221 (est.); cardinal, 33; purple finch, 1; Am. goldfinch, 51; eastern towhee, 7; vesper sparrow, 13; junco, 2; chipping sparrow, 168; field sparrow, 87; white-throated sparrow, 62; fox sparrow, 2; swamp sparrow, 7; song sparrow, 18. **Total,** 65 species; approximately 11,389 individuals. — Herbert L. Stoddard.

148. Daytona Beach, Fla. (peninsula from Zelda Blvd. to Inlet, beach and river road; mainland 10 miles west to point where old and new Deland Roads meet, south to just beyond Spruce Creek; pinelands 27%, lagoons and pond 26%, beach 8%, scrub 10%, palmetto-deciduous growth 13%, fields 13%, town streets 3%). — Dec. 23; 6:30 a.m. to 4:15 p.m. Foggy to overcast; temp. 49° to 69°; wind SE to SW, 1-15 m.p.h. Fifteen observers in 5 parties. Total hours, 25¼ (13¾ on foot, 11½ by car); total miles, 99½ (90 by car, 9½ on foot). Common loon, 7; pied-billed grebe, 2; brown pelican, 145; double-crested cormorant, 140; great blue heron, 4; Am. egret, 103; snowy egret, 10; Louisiana heron, 31; little blue heron, 7; green heron, 1; black-crowned night heron, 3; wood ibis, 4; scaup duck [sp.], 32; red-breasted merganser, 39; turkey vulture, 17; black vulture, 109; red-shouldered hawk, 4; bald

eagle, 5; duck hawk, 1; sparrow hawk, 23; bob-white, 9; clapper rail, 1; Florida gallinule, 2; Am. coot, 35; piping plover, 5; semipalmated plover, 2; killdeer, 40; black-bellied plover, 7; ruddy turnstone, 36; spotted sandpiper, 3; knot, 32; semipalmated sandpiper, 3; sanderling, 200; herring gull, 21; ring-billed gull, 728; laughing gull, 17; Bonaparte's gull, 16; Forster's tern, 142; royal tern, 59; black skimmer, 1643; mourning dove, 7; ground dove, 13; screech owl, 1; belted kingfisher, 20; yellow-shafted flicker, 9; red-bellied woodpecker, 25; red-headed woodpecker, 2; yellow-bellied sapsucker, 1; eastern phoebe, 25; tree swallow, 123 (flock of 5000 est. on Dec. 26); blue jay, 17; Am. crow, 24; fish crow, 28; Carolina chickadee, 8; brown-headed nuthatch, 1; house wren, 37; Carolina wren, 14; mockingbird, 67; catbird, 12; robin, 21; eastern bluebird, 66; blue-gray gnatcatcher, 8; ruby-crowned kinglet, 20; loggerhead shrike, 21; black and white warbler, 2; myrtle warbler, 187; yellow-throated warbler, 5; pine warbler, 3; prairie warbler, 1; palm warbler (western), 56; yellow-throat, 4; English sparrow, 17; eastern meadowlark, 7; red-wing, 27; cardinal, 28; Am. goldfinch, 2; eastern towhee, 22; Savannah sparrow, 12; sharp-tailed sparrow, 1; chipping sparrow, 6; field sparrow, 2; swamp sparrow, 6; song sparrow, 3. **Total,** 83 species; approximately 4649 individuals. (Seen in area during period: horned grebe, 2; sharp-shinned hawk, 1; red-tailed hawk, 1; osprey, 1; scrub jay, 5.) — **R. J.** Longstreet, Mr. and Mrs. F. A. Berger, Mr. and Mrs. F. B. Rich, Mr. and Mrs. H. F. Kortheuer, Mrs. J. W. Remer, Mrs. L. C. Trench, Eva M. Porter, Mary A. Walbran, Elizabeth L. Mead, Hazel W. Graves, Ida E. Warden, Rosella S. Ames (Halifax River Bird Club).

149. Monroe, Fla. (part of same area as previous years, 5 miles on South Loop, 15 miles on main Tamiami Trail; canal bank, cypress swamp and everglades 100%). — Dec. 23. Dark cloudy in a.m., partly clear in p.m.; temp. 63° to 70°; no wind. Observers together. Total hours, 8 (6½ on foot, 1½ in car); total miles, 25 (10 on foot, 15 in car). Pied-billed grebe, 4; double-crested cormorant, 4; Ward's heron, 19; Am. egret, 413; snowy egret, 53; Louisiana heron, 22; little blue heron, 327; green heron, 5; black-crowned night heron, 1; yellow-crowned night heron, 8; Am. bittern, 2; wood ibis, 500 (est.); white ibis, 17; Florida duck, 2; lesser scaup duck, 1; turkey vulture, 47; black vulture, 2; red-shouldered hawk, 12; bald eagle, 1; marsh hawk, 3; osprey, 2; sparrow hawk, 13; limpkin, 4; Florida gallinule, 19; Am. coot, 2; barred owl, 1; belted kingfisher, 32; yellow-shafted flicker, 1; red-bellied woodpecker, 4; crested flycatcher, 1; eastern phoebe, 14; tree swallow, 2000 (est.); Am. crow, 18; tufted titmouse, 1; house wren, 14; Carolina wren, 2; mockingbird, 15; catbird, 6; robin, 4; eastern bluebird, 12; blue-gray gnatcatcher, 19; white-eyed vireo, 5; Cape May warbler, 2; myrtle warbler, 4; western palm warbler, 36; yellow-throat, 71; eastern meadowlark, 7; red-wing, 137; boat-tailed grackle, 151; purple grackle, 104; cardinal, 18; Savannah sparrow, 2; swamp sparrow, 29. **Total,** 53 species; approximately 4193 individuals. — Louis A. Stimson, Robert A. Woodmansee.

150. Myakka River State Park, Fla. (parts of Sarasota and Manatee Cos.; prairie, with ponds, river and swamps 75%, woodland, live oak and cabbage palm 25%). — Dec. 31; 7 a.m. to 6 p.m. Clear; temp. 63° to 75°; wind SE, 1-7 m.p.h. Four observers together. Total hours, 11 (3 on foot, 8 by car); total miles, 26 (3 on foot, 23 by park truck). Pied-billed grebe, 3; double-crested cormorant, 35; water-turkey, 4; Ward's heron, 27; Am. egret, 65; snowy egret, 54; Louisiana heron, 98; little blue heron, 144; Am. bittern, 1 (heard); wood ibis, 161; white ibis, 291; black duck, 16; baldpate, 3; pintail, 10; turkey vulture, 84; black vulture, 68; sharp-shinned hawk, 3; red-tailed hawk, 1; red-shouldered hawk, 17; bald eagle, 4; marsh hawk, 5; Audubon's caracara, 2 (6 living within park limits); sparrow hawk, 9; bob-white, 45; sandhill crane, 50; killdeer, 33; Wilson's snipe, 3; lesser yellow-legs, 2; dowitcher, 54; laughing gull, 3; mourning dove, 64; ground dove, 14; horned owl, 2; barred owl, 5 (heard); belted kingfisher, 5; yellow-shafted flicker, 7; pileated woodpecker, 1 (heard); red-bellied woodpecker, 4; eastern phoebe, 12; tree swallow, 176; blue jay, 11; Am. crow, 44; fish crow, 16; Carolina wren, 3; mockingbird, 28; catbird, 2; brown thrasher, 1; robin, 7; eastern bluebird, 8; blue-gray gnatcatcher, 18; loggerhead shrike, 24; myrtle warbler, 3; yellow-throated warbler, 3; palm warbler, 127; eastern meadowlark, 31; red-wing, 535; boat-tailed grackle, 9; bronzed grackle, 32; cardinal, 5; eastern towhee, 6; vesper sparrow, 2; chipping sparrow, 2; song sparrow, 3. **Total,** 63 species; 2505 individuals. — State Park Supt. Allen Crowley, Paula Dillman, Mary B. Brown, Olga Zurcher.

151. Pensacola, Fla. (same territory as for many years; city and suburban areas 10%, open sound and bay and bay shores [largely by car] 25%, scrub oak barrens 2%, mature live oak and deciduous forest 18%, fields, pastures and cut-over woodland [mostly by car] 16%, fresh-water wooded swamps 2%, fresh-water open ponds 6%, salt marshes 1%, Gulf beach and dunes 3%, pine woods 17%). — Dec. 21; 7:15 a.m. to 5:15 p.m. Clear; temp. 45° to 66°; wind N, 4 m.p.h. in early a.m., to 15 m.p.h. by noon. Ten observers in 3 parties. Total hours, 30 (13 by car, 17 on foot); total miles, 118 (103 by car, 15 on foot). Common loon, 35; horned grebe, 65; pied-billed grebe, 18; brown pelican, 9; gannet, 2; double-crested cormorant, 76; great blue heron, 4; pintail, 2; canvas-back (rare), 14 (1 flock); lesser scaup duck, 427 (includes flock of 200, est.); Am. golden-eye, 31; buffle-head, 22; hooded mer-

ganser, 4; red-breasted merganser, 38; turkey vulture, 18; black vulture, 29; sharp-shinned hawk, 1; red-shouldered hawk, 2; bald eagle, 4; sparrow hawk, 10; bob-white, 11 (1 covey); clapper rail, 1; Am. coot, 12; piping plover, 1; semipalmated plover (seldom seen in winter), 5; killdeer, 53; black-bellied plover, 5; woodcock (very rare), 2; Wilson's snipe, 1; greater yellow-legs, 1; red-backed sandpiper, 10; sanderling, 38; herring gull, 45; ring-billed gull, 154; laughing gull, 11; Forster's tern, 8; royal tern, 8; black skimmer, 24 (1 flock); mourning dove, 8; belted kingfisher, 12; yellow-shafted flicker, 13; pileated woodpecker, 1; red-bellied woodpecker, 8; red-headed woodpecker, 1; yellow-bellied sapsucker, 2; hairy woodpecker, 1; downy woodpecker, 1; red-cockaded woodpecker, 1; eastern phoebe, 18; tree swallow, 216; barn swallow (never before seen between Nov. and April), 5 (with tree swallows; buffy underparts and deeply forked tail noted — C. J. K., E. J. K., L. P.); blue jay, 59; Am. crow and fish crow (some of each identified by sound, count includes all seen), 69; Carolina chickadee, 6; tufted titmouse, 25; brown-headed nuthatch, 3; brown creeper (rare), 2; house wren, 6; Bewick's wren (rare), 3; Carolina wren, 11; long-billed marsh wren, 1; mockingbird, 53; brown thrasher, 11; robin, 304 (includes est. flocks of 110 and 75); hermit thrush, 5; eastern bluebird, 55; blue-gray gnatcatcher, 9; golden-crowned kinglet, 81; ruby-crowned kinglet, 113; Am. pipit, 110 (flocks of 50 and 60); loggerhead shrike, 30; starling, 81; white-eyed vireo (rare in winter), 1; blue-headed vireo, 5; orange-crowned warbler, 4; myrtle warbler, 376; yellow-throated warbler, 2; pine warbler, 50; palm warbler (typical examples of both western and yellow palms definitely identified), 58; yellow-throat, 6; English sparrow, 28; eastern meadowlark, 8; red-wing, 195; purple grackle (rare in winter), 1; cardinal, 21; Am. goldfinch, 126; eastern towhee, 12; Savannah sparrow, 17; Henslow's sparrow (elusive, may be common), 1 (wet broom-sedge location, olive head and neck, red in wings, 7X glasses — F. B., L. E. G., A. C. S.); vesper sparrow, 14; chipping sparrow, 139 (includes flock of 125, est.); field sparrow, 12; white-throated sparrow, 46; swamp sparrow, 7; song sparrow, 8. **Total,** 96 species (1 additional subspecies); about 3662 individuals. — Francis M. Weston, Frank Bray, Lyman E. Goodnight, Charles J. Kahn, E. J. Koestner, Lennie Pate, Alan C. Sheppard, Maleta M. Wernicke, Geneva W. Weston, A. F. Wicke, Jr. (The Francis M. Weston Society of Natural History).

152. St. Augustine, Fla. (same territory as last year, but more intensive coverage of inland areas due to larger party; ocean and inlet beaches, flats, salt marshes and bays 40%, woodlands, pine and live oak and borders 50%, golf courses, pastures, fields and palmetto scrub 10%). — Dec. 21; dawn to sunset. Cloudy until 10 a.m., then rain varying from drizzles to heavy downpours until 4 p.m., then cloudy; temp. 65° to 58°; wind, dead calm to 11 a.m., then gradually rising NW to about 15 m.p.h. Three observers separately in a.m., 2 together part of p.m. Total hours, 30 (15 on foot, 15 by car); total miles, 12 on foot, 80 by car. Common loon, 4; red-throated loon, 1 (found with broken wing, but still alive); horned grebe, 2; pied-billed grebe, 1; brown pelican, 410; gannet, 58; double-crested cormorant, 1000 (est.); great blue heron, 7; Am. egret, 22; snowy egret, 26; Louisiana heron, 32; little blue heron, 68; mallard, 6; black duck, 3; pintail, 2; blue-winged teal, 2; wood duck, 1; lesser scaup duck, 31; Am. golden-eye, 20 (unusual, but clearly seen at close range — C. H. P., H. K.); hooded merganser, 6; red-breasted merganser, 77; turkey vulture, 6; black vulture, 2; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 1; red-shouldered hawk, 4; bald eagle, 2; marsh hawk, 6; osprey, 1; duck hawk, 1; sparrow hawk, 16; bob-white, 10; wild turkey, 3; clapper rail, 1; Florida gallinule, 1; Am. coot, 19; Am. oyster-catcher, 14; piping plover, 8; semipalmated plover, 37; killdeer, 78; black-bellied plover, 286; ruddy turnstone, 110; long-billed curlew, 3 (present since Dec. 8 at same field where 1 wintered last year; 1 is crippled bird, presumably same as last year's cripple); Hudsonian curlew, 3; willet, 92; greater yellow-legs, 2; knot, 12; least sandpiper, 6; red-backed sandpiper, 166; dowitcher, 32; semipalmated sandpiper, 36; western sandpiper, 152; marbled godwit, 9; Hudsonian godwit, 1 (this species, apparently not previously recorded in Florida, was first seen at long range with 50X tripod binoculars, then moved to within less than 100 yards in perfect light on mud flat; it was then within 3 feet of marbled godwit; points noticed were gray plumage, slightly smaller size, bill not so conspicuously dark at tip, white on tip of tail, rump and wings, and the dark wing linings seen when in flight; date not remarkable as status of shorebirds here shows fall migration still in progress this date, but occurrence is noteworthy, and the identification is rendered completely valid by fact bird was at same locality the next day and observations were further verified — C. H. P., H. K.); sanderling, 37; herring gull, 400; ring-billed gull, 125; laughing gull, 150; Bonaparte's gull, 42; Forster's tern, 68; common tern, 8; royal tern, 175; Caspian tern, 6; black skimmer, 700 (est.); mourning dove, 22; ground dove, 3; horned owl, 1 (dead, had been hit by car); belted kingfisher, 16; yellow-shafted flicker, 5; red-bellied woodpecker, 9; yellow-bellied sapsucker, 1; hairy woodpecker, 2; downy woodpecker, 3; red-cockaded woodpecker, 1; eastern phoebe, 6; tree swallow, 18; blue jay, 21; Florida jay, 2; Am. crow, 8; fish crow, 2; Carolina chickadee, 11; tufted titmouse, 7; brown-headed nuthatch, 17; house wren, 6; Carolina wren, 11; mockingbird, 102; catbird, 4; brown thrasher, 2; yellow-throat, 7; robin, 1400 (est.); hermit thrush,

1; eastern bluebird, 27; ruby-crowned kinglet, 62; Am. pipit, 16; loggerhead shrike, 32; starling, 60; white-eyed vireo, 3; blue-headed vireo, 2; black and white warbler, 1; orange-crowned warbler, 3; myrtle warbler, 3000 (est.); black-throated green warbler, 1 (same live oaks where seen last 2 winters — C.H.P.); yellow-throated warbler, 1; pine warbler, 32; palm warbler, 33; English sparrow, 14; eastern meadowlark, 107; red-wing, 92; rusty blackbird, 12; boat-tailed grackle, 2; purple grackle, 27; cowbird, 11; cardinal, 22; Am. goldfinch, 11; eastern towhee (including 2 white-eyed towhees), 26; Savannah sparrow, 7; Henslow's sparrow, 2; seaside sparrow, 2; vesper sparrow, 9; pine-woods sparrow, 2; chipping sparrow, 17; field sparrow, 2; white-throated sparrow, 2; swamp sparrow, 2; song sparrow, 1. **Total,** 126 species (1 additional subspecies); approximately 9943 individuals. Records of wild turkey, mallard and pintail are birds shot and brought in by hunters in area on day of count. (Seen in area Dec. 24: water turkey, 1; greater scaup duck, 7; pileated woodpecker, 2; white-breasted nuthatch, 2; Dec. 26: white ibis, 8; black-crowned night heron, 1; Wilson's snipe, 1; barn owl, 1; sharp-tailed sparrow, 2.) — Clifford H. Pangborn, Arthur F. McBride, Henry Kritzler.

153. St. Marks, Fla. (same area covered in previous counts with addition of Wakulla Springs, Wakulla Beach, Live Oak Point, and intermediate points; shores of fresh water lakes and ponds, mostly open 15%, Gulf beach 15%, salt and fresh-water marshes 20%, uncultivated and cultivated fields 15%, pine woods 13%, deciduous woods 22%). — Dec. 23. Mostly fair; temp. 41° to 69°; wind NW, 0-9 m.p.h. Five observers in 2 to 3 parties. Total hours, 22 (20½ on foot, 1½ by car); total miles, 35 (15 on foot, 20 by car). Common loon, 2; horned grebe, 12; pied-billed grebe, 33; brown pelican, 1; double-crested cormorant, 33; water-turkey, 13; great blue heron, 9; Am. egret, 12; snowy egret, 22; Louisiana heron, 18; little blue heron, 10; green heron, 1 (H. S., B. H.); Canada goose, 1400 (est.); mallard, 5; black duck, 15; gadwall, 13; baldpate, 100 (est.); pintail, 33; green-winged teal, 3; blue-winged teal, 19; shoveller, 36; wood duck, 1; redhead, 1; ring-necked duck, 75; canvas-back, 35; lesser scaup duck, 62; buffle-head, 12; ruddy duck, 64; red-breasted merganser, 33; turkey vulture, 60; black vulture, 45; Cooper's hawk, 3; red-tailed hawk, 4; red-shouldered hawk, 5; bald eagle, 7; marsh hawk, 5; sparrow hawk, 6; bob-white, 1; wild turkey, 1 (killed by hunter); limpkin, 1; Virginia rail, 1; sora, 1 (W. C., R. S.); Florida gallinule, 4; Am. coot, 2300 (est.); semipalmated plover, 30; killdeer, 2; black-bellied plover, 21; ruddy turnstone, 40; Wilson's snipe, 2; willet, 100; greater yellow-legs, 21; least sandpiper, 6; red-backed sandpiper, 100 (est.); dowitcher, 26; semipalmated sandpiper, 1; western sandpiper, 1; sanderling, 1; herring gull, 16; ring-billed gull, 27; laughing gull, 1; common tern, 1; black skimmer, 6; mourning dove, 7; horned owl, 2; barred owl, 4; belted kingfisher, 9; yellow-shafted flicker, 16; pileated woodpecker, 7; red-bellied woodpecker, 19; red-headed woodpecker, 25; yellow-bellied sapsucker, 13; downy woodpecker, 5; eastern phoebe, 21; tree swallow, 1000 (est.); blue jay, 44; Am. crow, 32; fish crow, 300 (est.); Carolina chickadee, 9; tufted titmouse, 19; white-breasted nuthatch, 1 (H. S.); brown-headed nuthatch, 8; brown creeper, 2; house wren, 9; winter wren, 1; Carolina wren, 16; long-billed marsh wren, 5; short-billed marsh wren, 6; mockingbird, 25; catbird, 3; brown thrasher, 15; robin, 390; hermit thrush, 15; eastern bluebird, 15; blue-gray gnatcatcher, 3; golden-crowned kinglet, 9; ruby-crowned kinglet, 62; Am. pipit, 6; cedar waxwing, 2; loggerhead shrike, 5; starling, 3; white-eyed vireo, 1; blue-headed vireo, 7; black and white warbler, 3; orange-crowned warbler, 3; myrtle warbler, 120; yellow-throated warbler, 2; pine warbler, 20; palm warbler (both races), 14; yellow-throat, 19; eastern meadowlark, 37; red-wing, 900 (est.); boat-tailed grackle, 52; purple grackle, 5; cardinal, 37; Am. goldfinch, 120; eastern towhee, 28; Savannah sparrow, 3; sharp-tailed sparrow, 1 (B. H.); seaside sparrow, 8; vesper sparrow, 7; field sparrow, 20; white-throated sparrow, 32; swamp sparrow, 31; song sparrow, 26. **Total,** 124 species; approximately 8548 individuals. — William H. Cross, Branch Howe, Jr., Victor Janson, Rollin R. Stevens, Henry M. Stevenson.

154. St. Petersburg, Fla. (Gulfport, Pass-a-Grille, Gulf Beaches, Shore Acres and inland south of Largo; shore 70%, residential and fields 15%, swamps 5%, woodland 10%). — Dec. 22. Mostly still and clear; temp. 52° to 65°. Twenty-two observers in 7 parties. Total hours, 60½ (30½ in car, 30 on foot); total miles, 186 (144 by car, 42 on foot). Common loon, 109; horned grebe, 45; pied-billed grebe, 19; white pelican, 7; brown pelican, 794; double-crested cormorant, 1227; water-turkey, 1; great blue heron, 34; Am. egret, 132; snowy egret, 67; reddish egret, 1; Louisiana heron, 52; little blue heron, 93; black-crowned night heron, 4; yellow-crowned night heron, 18; wood ibis, 3; white ibis, 17; mallard, 1; mottled duck, 27; pintail, 4; blue-winged teal, 6; redhead, 12; ring-necked duck, 9; canvas-back, 6; lesser scaup duck, 1085; ruddy duck, 58; red-breasted merganser, 163; turkey vulture, 136; black vulture, 44; sharp-shinned hawk, 1; Cooper's hawk, 2; red-tailed hawk, 3; red-shouldered hawk, 7; bald eagle, 27; marsh hawk, 8; pigeon hawk, 1; sparrow hawk, 60; bob-white, 61; clapper rail, 2; sora, 1; Florida gallinule, 51; Am. coot, 1015; semipalmated plover, 20; Wilson's plover, 29; killdeer, 157; black-bellied plover, 34; ruddy turnstone, 59; spotted sandpiper, 15; willet, 62; lesser yellow-legs, 1; knot, 2; least sandpiper, 8; red-backed sandpiper, 117; dowitcher, 6; semipalmated sandpiper, 9; western sandpiper,

3; marbled godwit, 1; sanderling, 108; herring gull, 301; ring-billed gull, 1135; laughing gull, 177; Bonaparte's gull, 1; Forster's tern, 66; royal tern, 146; Caspian tern, 9; black skimmer, 747; mourning dove, 284; ground dove, 85; belted kingfisher, 57; yellow-shafted flicker, 38; red-bellied woodpecker, 67; red-headed woodpecker, 8; yellow-bellied sapsucker, 1; hairy woodpecker, 1; downy woodpecker, 3; eastern phoebe, 49; tree swallow, 1042; blue jay, 50; fish crow, 342; tufted titmouse, 9; brown-headed nuthatch, 16; house wren, 12; Carolina wren, 7; long-billed marsh wren, 5; mockingbird, 265; catbird, 11; brown thrasher, 1; robin, 16; eastern bluebird, 66; blue-gray gnatcatcher, 43; ruby-crowned kinglet, 7; Am. pipit, 38; loggerhead shrike, 121; blue-headed vireo, 7; black and white warbler, 4; orange-crowned warbler, 1; myrtle warbler, 243; yellow-throated warbler, 12; pine warbler, 19; prairie warbler, 11; palm warbler (western), 360; oven-bird, 1; yellow-throat, 24; English sparrow, 60; eastern meadowlark, 54; red-wing, 334; boat-tailed grackle, 278; purple grackle, 12; cardinal, 33; Am. goldfinch, 106; eastern towhee, (red-eyed and white-eyed), 61; Savannah sparrow, 50; pine-woods sparrow, 4; chipping sparrow, 5; swamp sparrow, 16. **Total,** 115 species (1 additional subspecies); approximately 12,965 individuals. (Seen during the period: Am. golden-eye, 2.) — Mrs. H. D. Pomeroy, Marie P. Cobb, H. S. Slocum, C. N. Moore, Cleora Adams, Grace Martin, Miss Kelly, A J. Dietrich, Mary Louise Mills, Robin Mills, Larry Pomeroy, Boyd Hill, Donald Bouge, W. G. Fargo, Martha Buchwald, Nellie G. Greene, Marjorie Quirin, John E. Williams, Mabel R. Becker, Molly C. Rutherford, Mrs. Harold Silbereisen, Daisie M. Morrison.

155. Tallahassee, Fla. (north end of Lake Jackson; center of town to two miles northward; Lake Lafayette; vicinity of airport and Florida State University farm; open lake shores 30%, wooded lake shores 20%, marshes 2%, cultivated fields 5%, pastures and old fields 18%, pine w ds 5%, deciduous woods 12%, residential sections 8%). — Dec. 20. Mostly cloudy, with occasional light showers and steady rain from 4 p.m. on; temp. 48° to 58°; wind ENE, 0-10 m.p.h. Three observers, separate. Total hours, 24 (on foot); total miles, 28 (on foot). Horned grebe, 18; pied-billed grebe, 45; double-crested cormorant, 35; great blue heron, 5; Am. egret, 12; Louisiana heron, 10; little blue heron, 15; Canada goose, 300; gadwall, 3; baldpate, 10; blue-winged teal, 2; redhead, 1; ring-necked duck, 225; canvas-back, 4; lesser scaup duck, 20; Am. golden-eye, 1; buffle-head, 7; ruddy duck, 50; turkey vulture, 7; black vulture, 16; sharp-shinned hawk, 1; red-tailed hawk, 5; red-shouldered hawk, 5; bald eagle, 2; marsh hawk, 3; sparrow hawk, 12; bob-white, 8; Florida gallinule, 3; Am. coot, 950; killdeer, 65; Wilson's snipe, 2; spotted sandpiper, 1 (present on Lake Ella since November — H. S.); greater yellow-legs, 3; herring gull, 3; ring-billed gull, 34; mourning dove, 41; horned owl, 1; belted kingfisher, 11; yellow-shafted flicker, 28; pileated woodpecker, 2; red-bellied woodpecker, 16; red-headed woodpecker, 11; yellow-bellied sapsucker, 9; hairy woodpecker, 1; downy woodpecker, 2; eastern phoebe, 56; tree swallow, 90; blue jay, 51; Am. crow, 57; fish crow, 2; Carolina chickadee, 22; tufted titmouse, 13; brown creeper, 2; house wren, 45; winter wren, 3; Carolina wren, 44; long-billed marsh wren, 1 (W. C.); short-billed marsh wren, 4; mockingbird, 40; brown thrasher, 12; robin, 420; hermit thrush, 22; eastern bluebird, 21; blue-gray gnatcatcher, 11; golden-crowned kinglet, 20; ruby-crowned kinglet, 100; Am. pipit, 100; cedar waxwing, 30; loggerhead shrike, 18; starling, 1; white-eyed vireo, 2; blue-headed vireo, 6; black and white warbler, 2; orange-crowned warbler, 10; myrtle warbler, 160; pine warbler, 11; palm warbler (both races), 39; yellow-throat, 19; English sparrow, 50; eastern meadowlark, 150; red-wing, 70; grackle [sp.], 1; cardinal, 66; Am. goldfinch, 19; eastern towhee, 62; Savannah sparrow, 16; vesper sparrow, 3; chipping sparrow, 30; field sparrow, 56; white-throated sparrow, 110; swamp sparrow, 15; song sparrow, 23. **Total,** 92 species (1 additional subspecies); about 4110 individuals. (Seen in area during preceding week: mallard, ground dove, barred owl, cowbird.) — William H. Cross, Rollin Stevens, Henry M. Stevenson.

156. Ashland, Ohio (Charles Mill Dam area, same area as 1946 count; deciduous woods 25%, waste fields 40%, cultivated fields 5%, marsh and bushy swamps 15%, roadsides 10%, pine plantings 5%). — Dec. 21; 7:45 a.m. to 5 p.m. Cloudy, clearing in p.m.; temp 32° to 36° F.; wind N, 5-10 m.p.h.; ground frozen; lake frozen except at inlets. Eleven observers in 4 parties. Total hours, 29 (on foot); total miles, 34 (on foot). Black duck, 5; red-tailed hawk, 1; sparrow hawk, 1; bob-white, 16; ring-necked pheasant, 1; mourning dove, 1; barred owl, 2; belted kingfisher, 3; yellow-shafted flicker, 11; pileated woodpecker, 1; red-bellied woodpecker, 14; hairy woodpecker, 23; downy woodpecker, 28; blue jay, 18; black-capped chickadee, 25; tufted titmouse, 51; white-breasted nuthatch, 27; brown creeper, 1; Carolina wren, 1; eastern bluebird, 16; starling, 90; English sparrow, 271; eastern meadowlark, 3; cardinal, 51; purple finch, 10; Am. goldfinch, 91; eastern towhee, 1; slate-colored junco, 139; tree sparrow, 713; swamp sparrow, 7; song sparrow, 66. **Total,** 31 species; approximately 1688 individuals. — Paul D. Harwood, Charles S. Ross, S. M. Martin, Robert W. Wolfgang, Paul Thornburg, Jack Guiley, M. R. Newkirk, Lee Hurd, George Preston, Kenneth Preston, Burton C. Kahl (members and guests, Ashland Naturalists Society).

157. Ashtabula, Ohio (Lake Erie shore from west of Ashtabula to Conneaut, 14 miles, and most

of the lake plain, from shore inland 4 miles). — Dec. 23; 7:30 a.m. to 5:30 p.m. Overcast, visibility excellent except during the fall of a bit of powder snow from 11 a.m. to 2 p.m. Temp. 30° to 33°; water birds concentrated on the shore side of breakwaters by strong on-shore wind, 10-30 m.p.h.; ground bare, partly frozen; all water open. Observers together most of day but working parallel survey lines about 200 yards apart. Total miles, 108 (62 by auto, 46 man-miles on foot). Common loon, 1; horned grebe, 2; whistling swan, 4 (2 im.); mallard, 4; black duck, 53; gadwall, 1; European widgeon, 1; baldpate, 7; green-winged teal, 2; shoveller, 1; redhead, 16; canvas-back, 7; greater scaup duck, 6 (two groups well seen at 100 feet at rest and in flight); lesser (and unidentified) scaup duck, 52; Am. golden-eye, 79; buffle-head, 1; white-winged scoter, 2; hooded merganser, 1; Am. merganser, 133; red-breasted merganser, 28; red-tailed hawk, 2; bald eagle, 1; marsh hawk, 1; sparrow hawk, 1; ruffed grouse, 3; ring-necked pheasant, 3; great black-backed gull, 1; herring gull, 465; ring-billed gull, 92; Bonaparte's gull, 356; little gull, 1; [no details — Ed.]; barred owl, 1; yellow-shafted flicker, 1; pileated woodpecker, 1; hairy woodpecker, 3; downy woodpecker, 6; blue jay, 16; Am. crow, 1 (dead); black-capped chickadee, 69; tufted titmouse, 21; white-breasted nuthatch, 12; red-breasted nuthatch, 2; brown creeper, 5; winter wren, 1; robin, 1; golden-crowned kinglet, 5; cedar waxwing, 14; starling, 105; English sparrow, 245; cardinal, 72; Am. goldfinch, 3; eastern towhee, 2; slate-colored junco, 73; tree sparrow, 113; song sparrow, 27; snow bunting, 2. **Total,** 56 species; 2128 individuals. — Lawrence E. Hicks, Robert H. Mills, William F. Davis, Ernest Limes.

158. Buckeye Lake, Ohio (about the same area as in the past 23 years; deciduous woodlands 60%, open farmland 30%, brushy swamp and cattail marsh 10%). — Dec. 21; 7:15 a.m. to 5:15 p.m. Partly cloudy; temp. 28° to 38°; wind less than 5 m.p.h.; ground bare; 85% ice coverage on lake, streams partly ice-covered. Fourteen observers in 3 parties. Total man-miles, 88; total auto miles, 115. Mallard, 1210 (est.); black duck, 652 (est.); gadwall, 1; baldpate, 2; pintail, 10; green-winged teal, 11; redhead, 2; lesser scaup duck, 10; Am. golden-eye, 11; buffle-head, 3; ruddy duck, 2; hooded merganser, 6; Am. merganser, 5; sharp-shinned hawk, 1; Cooper's hawk, 4; red-tailed hawk, 8; red-shouldered hawk, 5; Am. rough-legged hawk, 1; marsh hawk, 3; sparrow hawk, 20; bob-white, 81 (7 coveys); ring-necked pheasant, 8; killdeer, 2; herring gull, 1; mourning dove, 35; barn owl, 1; screech owl, 2; barred owl, 5; belted kingfisher, 1; yellow-shafted flicker, 61; pileated woodpecker, 2; red-bellied woodpecker, 38; red-headed woodpecker, 18; hairy woodpecker, 15; downy woodpecker, 100; horned lark, 67 (apparently all prairies); blue jay, 52; Am. crow, 23; Carolina chickadee, 126; tufted titmouse, 126; white-breasted nuthatch, 145; brown creeper, 34; winter wren, 9; Bewick's wren, 1; Carolina wren, 12; long-billed marsh wren, 4; robin, 9; hermit thrush, 1; eastern bluebird, 21; golden-crowned kinglet, 7; ruby-crowned kinglet, 3; starling, 847; myrtle warbler, 31; English sparrow, 1684; eastern meadowlark, 32; red-wing, 388; rusty blackbird, 18; bronzed grackle, 8; cowbird, 46; cardinal, 192; purple finch, 12; Am. goldfinch, 43; white-winged crossbill, 2; eastern towhee, 5; Savannah sparrow, 2; slate-colored junco, 124; tree sparrow, 897; field sparrow, 1; fox sparrow, 1; swamp sparrow, 25 (est.); song sparrow, 362. **Total,** 71 species; 7697 individuals. — Arthur Borror, Donald J. Borror, Gareth E. Gilbert, Lawrence E. Hicks, Kelton W. Jones, Robert Z. Kavanagh, Arthur S. Kiefer, Frank W. Mead, Robert H. Mills, James Olsen, Carl R. Reese, Irvin B. Rickly, Milton B. Trautman, Walter Tucker.

159. Bucyrus, Ohio (Kuehnle and Rexroth farms southeast of city to bridge 4 miles southeast on Mt. Vernon Rd.; open woods 25%, dense woods 50%, bottomland 15%, farmland 10%). — Dec. 21; dawn to dusk. Overcast with intermittent sunlight in p.m.; temp. 30° to 35° F.; wind WNW, 8-12 m.p.h.; ground bare; ponds frozen over but streams with occasional open water. Two observers, working singly in a.m., together in p.m. Total hours, 10 (9 on foot, 1 in car); total miles, 25 (8 on foot, 17 in car). Red-tailed hawk, 1; Am. rough-legged hawk, 1; sparrow hawk, 1; bob-white, 11; mourning dove, 7; screech owl, 1; yellow-shafted flicker, 3; red-bellied woodpecker, 5; red-headed woodpecker, 2; hairy woodpecker, 2; downy woodpecker, 5; horned lark, 7; blue jay, 7; Am. crow, 1; black-capped chickadee, 1; tufted titmouse, 4; red-breasted nuthatch, 5; brown creeper, 12; robin, 1; starling, 102; English sparrow, 160; cardinal, 10; Am. goldfinch, 5; slate-colored junco, 18; tree-sparrow, 24; song sparrow, 18. **Total,** 26 species; 414 individuals. — Chas. H. Kuehnle, Paul F. Kuehnle.

160. Cadiz, Ohio (same area as in the past 47 years; yards and gardens in Cadiz 10%, open fields 50%, woods 25%, brushy roadsides 15%). — Dec. 21; 9:00 a.m. to 1:30 p.m., 2:45 to 5:15 p.m. Cloudy; temp. 28° to 39°; wind SW, light; ground bare. Three observers in a.m., 9 together p.m. Total hours 6½ (5½ on foot, 1 by car); total miles, 48 (8 on foot, 40 by car). Sparrow hawk, 4; bob-white, 1; belted kingfisher, 1; yellow-shafted flicker, 1; red-bellied woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 6; horned lark, 11; Am. crow, 8; Carolina chickadee, 8; tufted titmouse, 7; white-breasted nuthatch, 11; Carolina wren, 3; starling, 22; English sparrow, 88; cardinal, 6; Am. goldfinch, 9; eastern towhee, 2; slate-colored junco, 20; tree sparrow, 31; song sparrow, 8. **Total,** 21 species; 249 individuals. — Harry B. McConnell, John G. Worley,

John C. Worley, David Worley, Clara C. Worley, Milton M. Ronsheim, Harold and Martha M. Haverfield, Raymond Reed.

161. Canton, Ohio (area 15 miles in diameter with Canton as center; parks and suburbs 30%, woodlots 25%, open farmlands 30%, pasture lands, 15%). — Dec. 28. Alternately dull and very bright; occasional snow flurries; temp. 26° to 35° wind SW, 0-15 m.p.h.; 2-in. of snow; lakes and ponds frozen. Sixteen observers in 12 parties. Total hours, 28 (23 on foot 5 by car); total miles, 50 (30 on foot, 25 by car). Red-tailed hawk, 1; Am. rough-legged hawk, 1; sparrow hawk, 6; bob-white, 82; yellow-shafted flicker, 1; hairy woodpecker, 1; downy woodpecker, 25; blue jay, 7; Am. crow, 61; black-capped chickadee, 32; tufted titmouse, 19; white-breasted nuthatch, 5; brown creeper, 6; starling, 38; English sparrow, 541; cowbird, 1 (J. L. F.); cardinal, 71; eastern towhee, 6 (H. B., G. K.); slate-colored junco, 105; tree sparrow. 131; song sparrow, 54. **Total,** 21 species; 1194 individuals. — Eleanor Anderson, May Baughman, Mrs. H. W. Benedict, J. G. Biers, Howard Braun, Mrs. John Danner, Don Collins, Mr. and Mrs. J. L. Floyd, C. F. Kaufhaultz, Ernest Kell, Grover Keplinger, Edward Kimes, George Nieport, Mr. and Mrs. D. R. Pratt (members of the Neo Naturalists).

162. Cincinnati, Ohio (southeastern corner of Hamilton Co. and southwestern corner of Cleremont Co.; woods and fields in Cleremont Co., confluence of Little Miami and Ohio Rivers, Remington gravel pits, Ohio River below Twelve Mile Creek; open farmland 46%, deciduous thickets 28%, deciduous woods 20%, river banks 5%, ponds 1%). — Dec. 28; dawn to dusk. Fair; temp. 29° to 39° F.; wind NW, 5-15 m.p.h.; ponds frozen (holes in two), rivers open, snow on north slopes only. Fifteen observers in 3 parties. Total hours, 31 (on foot); total miles, 20 (on foot). Mallard, 62; black duck, 229; pintail, 3; redhead, 1; ring-necked duck, 2; Am. golden-eye, 2; buffle-head, 1; hooded merganser, 11 sharp-shinned hawk, 1; Cooper's hawk, 4; red-tailed hawk, 1; red-shouldered hawk, 3; marsh hawk, 1; sparrow hawk, 2; bob-white, 18; herring gull, 8; ring-billed gull, 12; mourning dove, 348; screech owl, 2; barred owl, 2; belted kingfisher, 5; yellow-shafted flicker, 44; red-bellied woodpecker, 20; red-headed woodpecker, 12; yellow-bellied sapsucker, 1; hairy woodpecker, 4; downy woodpecker, 76; horned lark, 21; blue jay, 7; Am. crow, 4400 (est.); Carolina chickadee, 180; tufted titmouse, 118; white-breasted nuthatch, 9; red-breasted nuthatch, 2; brown creeper, 18; winter wren, 3; Carolina wren, 59; mockingbird, 3; robin, 33; hermit thrush, 1; gray-cheeked thrush, 1 (collected — K. H. M.); eastern bluebird, 43; golden-crowned kinglet, 7; ruby-crowned kinglet, 6; Am. pipit, 5; cedar waxwing, 8; starling, 90; myrtle warbler, 36; palm warbler, 4; English sparrow, 350; eastern meadowlark, 11; cardinal, 230; purple finch, 6; Am. goldfinch, 41; eastern towhee, 21; grasshopper sparrow, 1 (heard singing at different times by 2 people not together — H. H. S., G. R. A.); slate-colored junco, 285; tree sparrow, 109; field sparrow, 6; white-crowned sparrow, 9; white-throated sparrow, 12; swamp sparrow, 2; song sparrow, 147. **Total,** 63 species; approximately 7159 individuals. (Seen in same area Dec. 21: eastern phoebe, 1.) — G. D. Acomb, G. R. Austing, M. L. Bagel, R. W. Carpenter, V. Coles, W. Goodpaster, E. Kemsies, K. H. Maslowski, F. R. Neuffer, S. E. Sjodahl, V. C. Sloane, H. H. Spencer, B. Stevenson, H. Stevenson, N. Whitney, Jr.

163. Cleveland, Ohio (Gordon Park eastward to mouth of Chagrin River along the Lake Erie shore; inland to Shaker Lakes, Gates Mills, North Chagrin reservation, and Willoughby; lake shore 15%, beech-maple climax forest 20%, open fields 30%, town suburbs 15%, thickets 15%, swamps 5%). — Dec. 27; 8 a.m. to dusk. Overcast in a.m., clearing with intermittent sunshine in p.m.; temp. 25° to 33°; wind SW, 20-26 m.p.h.; 2-in. snow; Lake Erie open but ponds and streams mostly frozen. Twenty-nine observers in 9 parties. Total hours, 53 (34 on foot, 19 by car); total miles, 283 (65 on foot, 218 by car). Gannet, 2 (first census record); double-crested cormorant, 5; great blue heron, 1; mallard, 32; black duck, 25; redhead, 80; canvas-back, 1; lesser scaup duck, 315; Am. golden-eye, 27; buffle-head, 2; ruddy duck, 10; Am. merganser, 15; red-breasted merganser, 10; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 5; red-shouldered hawk, 1; bald eagle, 1; marsh hawk, 2; sparrow hawk, 4; bob-white, 29 (2 coveys); killdeer, 1 (first census record); Iceland gull, 1 (observed through 20X telescope — first census record); herring gull, 141; ring-billed gull, 1936 (est.); Bonaparte's gull, 1200 (est.); mourning dove, 1; barred owl, 1; belted kingfisher, 4; pileated woodpecker, 2; red-bellied woodpecker, 4; yellow-bellied sapsucker, 1 (first census record); hairy woodpecker, 12; downy woodpecker, 42; horned lark, 7; blue jay, 67; Am. crow, 7; black-capped chickadee, 121; tufted titmouse, 18; white-breasted nuthatch, 24; brown creeper, 3; Carolina wren, 1; robin, 30; golden-crowned kinglet, 20; cedar waxwing, 60; starling, 1044; myrtle warbler, 11; English sparrow, 354; rusty blackbird, 2 (first census record); cardinal, 48; common redpoll, 108 (1 flock of 100); Am. goldfinch, 16; eastern towhee, 5; slate-colored junco, 612; tree sparrow, 570; white-throated sparrow, 1; song sparrow, 25. **Total,** 57 species; approximately 7069 individuals. (SPECIAL NOTE: From 1 to 5 gannets, in immature plumage, present since Dec. 6. Iceland gull noted first on Dec. 25 by Geo. King, seen by most of group since.) — Leta Adams, Geo. Ainsley, Walter Baggaley, Jerry Brody, Vera Carrothers, Edith Dobbins, Mildred Ekberg, James Findley, Bob Foley, R. W. Hill, R. Kula, Luella and Nadine Literaty, Bob Malley, Howard Martin,

Mabel Meaker, Norman Negus, Margaret Perner, Bill Quay, F. N. Shankland, Margaret Sherwin, Marion Skaggs, Bob Smith, Ted Stevens, Kurt Student, Faith Swanson, Lida Whittier, A. B. Williams, M. B. Skaggs (guests and members, The Kirtland Bird Club).

164. Cuyahoga Falls, Ohio (same area as in former years; city and suburban parks 30%, deciduous woods, valleys and ravines 20%, open farm lands 15%, Summit Lake and Cuyahoga River 20%, golf courses 10%, and marsh lands 5%). — Dec. 21; 8:30 a.m. to 4:30 p.m. Broken clouds with occasional sunshine; temp. 29° to 35°; calm; Summit lake and Cuyahoga River open, all other waters frozen over; ground bare. Sixteen observers in 9 parties. Total hours, 79; total miles, 86 (51 by car, 35 on foot). Pied-billed grebe, 2; mallard, 31; black duck, 16; ring-necked duck, 1; Am. golden-eye, 6; buffle-head, 2; ruddy duck, 3; hooded merganser, 11; Am. merganser, 2; goshawk, 1; Cooper's hawk, 3; red-tailed hawk, 1; red-shouldered hawk, 2; marsh hawk, 1; sparrow hawk, 1; bob-white, 13; ring-necked pheasant, 3; Am. coot, 8; mourning dove, 2; horned owl, 1; belted kingfisher, 2; yellow-shafted flicker, 3; hairy woodpecker, 9; downy woodpecker, 66; blue jay, 72; Am. crow, 6; black-capped chickadee, 71; tufted titmouse, 37; white-breasted nuthatch, 53; red-breasted nuthatch, 2; brown creeper, 2; winter wren, 2; Carolina wren, 1; robin, 15; hermit thrush, 1; eastern bluebird, 1; golden-crowned kinglet, 5; ruby-crowned kinglet, 2; cedar waxwing, 130; starling, 182; myrtle warbler, 1; English sparrow, 466; cardinal 97; Am. goldfinch, 66 (4 reports); eastern towhee, 8 (3 reports); slate-colored junco, 232; tree sparrow, 305; field sparrow, 1; song sparrow, 24. **Total,** 49 species; about 1972 individuals. — H. O. Bolich, D. C. Byrer, Ralph Dexter, Mrs. Lawrence Fulmer, C. F. Gibbs, Alice Greene, John Lieftinck, Florence Liska, Tom McQuade, Chas. Mountz, Gertrude Renneckar, Fred Ruckman, Fred Smith, Lula Smith, Martin Smith, Gale Wiley (Cuyahoga Falls Audubon Club).

165. Dayton, Ohio (Woodland Cemetery, Madden Park, Oakwood, Hills and Dales, Miami River, Mad River, Stillwater River, Patterson Field, Wolf Creek, Taylorsville Dam, Miami Valley Golf Course, Indian Riffle Road, Shiloh, Trotwood, Triangle Park, Calvary Cemetery, Englewood Dam and Little York; woodland and thickets 30%, park and wooded residential 25%, open fields and country roads 30%, dry marsh and river bottoms 15%). — Dec. 28. Clear; temp. 17° to 31°; wind NW, 11-13 m.p.h.; 2-3-in. snow; ice in lakes, rivers mostly ice-free. Twenty-four observers, 5 singly, others in 6 parties. Total party-hours, 62; total party-miles, 171 (67 on foot, 104 by car). Pied-billed grebe, 1; great blue heron, 2; mallard, 1; black duck, 5; pintail, 1; Am. golden-eye, 1; hooded merganser, 2; sharp-shinned hawk, 1; Cooper's hawk, 6; goshawk, 2 (B. H. S., H. M. L., B. J. B.); red-tailed hawk, 4; Am. rough-legged hawk, 2; marsh hawk, 12; sparrow hawk, 12; duck hawk, 2 (C. O. H.); bob-white, 62; ring-necked pheasant, 10; killdeer, 2; mourning dove, 42; barn owl, 1; screech owl, 1; barred owl, 1; belted kingfisher, 7; yellow-shafted flicker, 44; red-bellied woodpecker, 4; yellow-bellied sapsucker, 1; hairy woodpecker, 9; downy woodpecker, 69; horned lark, 1; blue jay, 37; Am. crow, 576; Carolina chickadee, 142; tufted titmouse, 97; white-breasted nuthatch, 20; brown creeper, 22; winter wren, 5; Carolina wren, 9; mockingbird, 1; robin, 2; golden-crowned kinglet, 14; Am. pipit, 2; starling, 834; myrtle warbler, 7; English sparrow, 379; eastern meadowlark, 26; redwing, 1; rusty blackbird, 4; bronzed grackle, 1; cardinal, 226; purple finch, 1; Am. goldfinch, 32; eastern towhee, 13; slate-colored junco, 714; tree sparrow, 490; white-crowned sparrow, 1; white-throated sparrow, 4; Harris's sparrow, 4 (C.O.H. — black on throat noted, second local record); song sparrow, 119. **Total,** 58 species; 3804 individuals. (Seen within week, red-breasted nuthatch, palm warbler, cedar waxwing.) — Kenneth L. Meyers, Lucile Besom, Norman Bright, Louis B. Kalter, Jack Lambert, Catherine Hadeler, Anne Tuhy, Dorothea Eikenbary, Bertram Smith, Helen Lomeier, Don Lee, Bill Duelman, Frank Lakin, Dick Boyer, Fred Wills, Ruth Clark, Marguerite Aughe, Eva Sefton, C. O. Horst, Paul Knoop, Louis Blincoe, Joseph Blincoe, Mr. and Mrs. Ben J. Blincoe (Dayton Audubon Society).

166. Findlay, Ohio (east River Road, west River Road, Maplegrove Cemetery, Boy Scout Reservation, Strawbridge Marsh; evergreen plantation 50 acres, marsh 20 acres, second growth hardwood timber 50 acres). — Dec. 28; 9 a.m. to 5 p.m. Overcast; temp. 28° to 36°; wind S, 3 m.p.h.; ½ in. of snow; river open, marshes frozen. Observers together. Total miles, 30 (10 on foot, 20 by car). Red-tailed hawk, 1; marsh hawk, 1; ring-necked pheasant, 1; herring gull, 1; mourning dove, 35; barn owl, 1; screech owl, 1; yellow-shafted flicker, 2; hairy woodpecker, 1; downy woodpecker, 9; blue jay, 8; Am. crow, 7; white-breasted nuthatch, 10; tufted titmouse, 2; brown creeper, 2; robin, 1; starling, 235; English sparrow, 108; cardinal, 4; Am. goldfinch, 5; eastern towhee, 1; slate-colored junco, 27; tree sparrow, 2; song sparrow, 7. **Total,** 24 species; 472 individuals. — Eugene Price, James Dennis, Richard Fox, Dan Rose, Thelda Huston, Sara Caldwell, Richard Phillips (Findlay Naturalists Club).

167. Hamilton, Ohio (edge of town to Miami River, along river to Symnes Creek, returning to town; open farmland 40%, wood patches 40%, and weedy fields 20%). — Dec. 21; 9:30 a.m. to 5 p.m. Partly cloudy to clearing; ground bare; visibility fair; temp. 30° at start, 31° at return; wind W, light. Observers together. Total miles 18 (8 on foot, 10 by auto). Pied-billed grebe, 1; great blue

heron, 1; black-crowned night heron, 3; mallard, 2; lesser scaup duck, 2; sharp-shinned hawk, 1; red-tailed hawk, 1; red-shouldered hawk, 1; marsh hawk, 4; sparrow hawk, 8; bob-white, 21; killdeer, 4; mourning dove, 64; belted kingfisher, 4; yellow-shafted flicker, 7; red-bellied woodpecker, 2; hairy woodpecker, 3; downy woodpecker, 18; eastern phoebe, 1; horned lark, 12; blue jay, 5; Am. crow, 360; Carolina chickadee, 34; tufted titmouse, 28; brown creeper, 16; Carolina wren, 13; mockingbird, 1; eastern bluebird, 3; starling, 420; English sparrow, 226; eastern meadowlark, 16; cardinal, 38; Am. goldfinch, 84; slate-colored junco, 330; tree sparrow, 141; song sparrow, 121. **Total,** 36 species; 1996 individuals. — Frank Harbaum, Will Harbaum.

168. Lancaster, Ohio (within a radius of 5 miles of Lancaster, approximately same route as previous 23 years). — Dec. 21; 8 a.m. to 3 p.m. Overcast in a.m., clear in p.m.; ponds frozen, streams open with fringe ice; temp. 32° at start, 60° at return; wind W, 5 m.p.h. Five observers in 3 parties. Total hours, 24 (afoot); total miles, 28 (afoot). Bob-white, 18 (1 covey); mourning dove, 4; barred owl, 1; belted kingfisher, 1; yellow-shafted flicker, 30; pileated woodpecker, 2; red-bellied woodpecker, 2; yellow-bellied sapsucker, 1; downy woodpecker, 23; blue jay, 30; Am. crow, 2; Carolina chickadee, 43; tufted titmouse, 11; white-breasted nuthatch, 4; brown creeper, 6; winter wren, 1; Carolina wren, 9; robin, 78; eastern bluebird, 28; golden-crowned kinglet, 7; starling, 94; myrtle warbler, 1; Cape May warbler, 1 (observed at 20 feet for 2 minutes with 8X glasses — C. H. S., C. R. G.); English sparrow, 110; cardinal, 59; Am. goldfinch, 5; eastern towhee, 18; slate-colored junco, 7; tree sparrow, 17; song sparrow, 36. **Total,** 30 species; 649 individuals. — Florence Branum, Chas. H. Shaw, Paul J. Miller, Robert J. Goslin, Chas. R. Goslin.

169. Mansfield, Ohio (same areas as in previous counts; farm, fields, woods, including some conifer planting 75%, city parks 25%). — Dec. 27. Cloudy; wind SW, 10 m.p.h.; temp. 22° to 26°. Total hours, 7. Cooper's hawk, 1; red-tailed hawk, 1; sparrow hawk, 2; bob-white, 6; yellow-shafted flicker, 2; pileated woodpecker, 1; red-bellied woodpecker, 1; hairy woodpecker, 4; downy woodpecker, 4; horned lark, 12; blue jay, 4; black-capped chickadee, 7; tufted titmouse, 4; white-breasted nuthatch, 7; eastern bluebird, 1; starling, 75 (est.); English sparrow, 27; cardinal, 5; Am. goldfinch, 15; slate-colored junco, 70 (est.); song sparrow, 1. **Total,** 21 species; 250 individuals. — Lloyd Barr, Jane Spandau, Leona Miles, Marjorie Hayward, Marie Hoover, Lillian Franklin, H. M. Spandau.

170. Oxford, Ohio (Miami University and Western College campuses, Four Mile Creek 2 miles north and 1 mile south of Oxford, 1 mile along Harker's Run and 1 mile along Bull Run above respective junctions with Four Mile Creek, 1½ miles along Indian Creek west-southwest of Oxford, areas of Paul Logan and Harold Brown farms, Hueston's woods; creek and brook margins 45%, mature woodland 20%, open fields 15%, roadsides 10%, campus or urban areas 10%). — Dec. 22; 8 a.m. to 5:30 p.m. Overcast except for 2 hours before noon; temp. 20° to 34°; wind E to SSE, 5 m.p.h.; heavy hoar frost in morning; ground bare, frozen; ponds frozen, streams open. Twenty-three observers in 5 parties. Total party-hours, 37; total party-miles, 34. Great blue heron, 1; Cooper's hawk, 3; red-tailed hawk, 4; marsh hawk, 13; sparrow hawk, 1; bob-white, 26 (3 coveys); mourning dove, 240; screech owl, 2; barred owl, 1; belted kingfisher, 2; yellow-shafted flicker, 96; red-bellied woodpecker, 61; yellow-bellied sapsucker, 8; hairy woodpecker, 12; downy woodpecker, 112; eastern phoebe, 1; horned lark, 8; blue jay, 35; Am. crow, 102; Carolina chickadee, 183; tufted titmouse, 133; white-breasted nuthatch, 33; red-breasted nuthatch, 1; brown creeper, 11; winter wren, 4; Carolina wren, 36; mockingbird, 8; robin, 5; hermit thrush, 1 (R. D. B.); eastern bluebird, 51; golden-crowned kinglet, 25; ruby-crowned kinglet, 1; cedar waxwing, 1; starling, 137; myrtle warbler, 34; English sparrow, 382; eastern meadowlark, 40; cardinal 244; purple finch, 15; Am. goldfinch, 31; eastern towhee, 24; grasshopper sparrow, 1 (at 6 feet — M. W. B., W. C. McN.); slate-colored junco, 709; tree sparrow, 835; field sparrow, 6; Harris's sparrow, 1 (Mrs. R. A. H., J. W. L.); white-crowned sparrow, 19; white-throated sparrow, 27; song sparrow, 125. **Total,** 49 species; 3851 individuals. — David Barr, Dr. and Mrs. M. W. Boesel, Raymond D. Bourne, Calvin Conrad, Sears Crowell, Paul Daniel, Barbara and Donald Doan, Norman Fredericksen, Carolyn Hefner, Dr. and Mrs. R. A. Hefner, Willard Henning, Patricia Irvin, Mr. and Mrs. Paul Logan, David Logan, John W. Long, Russell J. Long, Carl Nelson, Virginia Stark, Don Weisman.

171. Painesville, Ohio (Mentor Marsh, from bridge at Headlands Road southward along west side of marsh and back along east side for 1½ miles; continuing northward to Lake Erie and back to starting point; also woods and pasture land on Concord-Hambden Rd.; marsh 50%, sand beach with some grasses and cottonwoods 10%, mature forest 30%, abandoned pasture with 3-4 year pines 10%). — Dec. 28; 8:30 a.m. to 4 p.m. Overcast; temp. 28°; wind NW, 25 m.p.h. in a.m., 8-12 m.p.h. in p.m.; marsh frozen, lake and creek in woods open. Eight observers in 2 parties. Total hours, 20; total miles, 16 (on foot). Cooper's hawk, 1; herring gull, 32; downy woodpecker, 2; blue jay, 2; black-capped chickadee, 25; tufted titmouse, 2; white-breasted nuthatch, 2; brown creeper, 2; golden-crowned kinglet, 4; starling, 60; English sparrow, 65; cardinal, 9; slate-colored junco, 61; tree sparrow, 32. **Total,** 14 species; 299 individuals. — Don Strock, John Strock, Robert Lord, Mr. and Mrs. W. S. Minnick, Elijah Brown, Mrs. Robert V. D. Booth, Warner Seely.

172. Portsmouth, Ohio (about the same area covered as in past 20 years). — Dec. 21. Dawn to dusk. Overcast in a.m. clear in p.m.; temp 31° at start, rising slowly during the day. Total miles, 94 (70 by car, 24 on foot). Five observers in 2 groups. Great blue heron, 1 (fresh tracks seen); mallard, 10; black duck, 172; red-tailed hawk, 4; red-shouldered hawk, 1; marsh hawk, 1; sparrow hawk, 17; ruffed grouse, 6; bob-white, 3; killdeer, 10; mourning dove, 44; screech owl, 1; barred owl, 1; belted kingfisher, 2; yellow-shafted flicker, 8; red-bellied woodpecker, 5; yellow-bellied sapsucker, 2; hairy woodpecker, 3; downy woodpecker, 22; horned lark, 8; blue jay, 10; Am. crow, 2017 (est.); Carolina chickadee, 88; tufted titmouse, 50; white-breasted nuthatch, 11; brown creeper, 3; winter wren, 15; Carolina wren, 26; robin, 1000 (est.); eastern bluebird, 8; golden-crowned kinglet, 39; starling, 85,000 (est.); English sparrow, 107; eastern meadowlark, 4; red-wing, 1000 (est.); rusty blackbird, 8000 (est.); bronzed grackle, 2000 (est.); cowbird, 3000 (est.); cardinal, 208; purple finch, 11; Am. goldfinch, 77; eastern towhee, 24; slate-colored junco, 165; tree sparrow, 195; field sparrow, 45 (1 collected); white-throated sparrow, 28; song sparrow, 178. **Total,** 47 species; about 103,630 individuals. (Seen in same area Dec. 25: golden eagle, 1; Cooper's hawk, 1.) — Conrad Roth, A. E. Hyder, Floyd B. Chapman, E. Limes, Dick Burns.

173. Salem, Ohio (along Middle Fork of Little Beaver Creek from New Albany to Coleman's, around Guilford Lake, the headwaters of Middle Fork and along Stone Mill Run to Franklin Square; open farm and marshland 25%, wooded valley 75%). — Dec. 28; 6:45 a.m. to 5 p.m. Overcast to 1 p.m., changing to broken clouds; continuous light snowfall until breaking of clouds, and very light flurries thereafter; visibility 15 miles at start decreasing to 3 miles and to ½ mile during flurries; temp 24° to 29° to 21°; wind W, 8-13 m.p.h., occasionally to 19-24 m.p.h.; 1-2 in. of snow; streams partly free from ice, marshes and lake frozen. Five observers in 4 parties. Total hours, 32; total miles, 35 (on foot). Cooper's hawk, 2; red-tailed hawk, 2; red-shouldered hawk, 1; sparrow hawk, 4; ruffed grouse, 3; ring-necked pheasant, 3 (tracks of 2); mourning dove, 1; horned owl, 1; belted kingfisher, 2; yellow-shafted flicker, 9; pileated woodpecker, 2; red-bellied woodpecker, 7; red-headed woodpecker, 4; hairy woodpecker, 20; downy woodpecker, 41; horned lark, 15; blue jay, 10; Am. crow, 4; black-capped chickadee, 60; tufted titmouse, 63; white-breasted nuthatch, 43; brown creeper, 8; winter wren, 4; Carolina wren, 2; golden-crowned kinglet, 21; ruby-crowned kinglet, 1; starling, 225; English sparrow, 158; red-wing, 1; cardinal, 126; Am. goldfinch, 56; eastern towhee, 4; slate-colored junco, 187; tree sparrow, 332; field sparrow, 9; song sparrow, 68. **Total,** 36 species; 1499 individuals. — Mr. and Mrs. Paul A. Stewart, Albert T. Hartley, Raymond O. Marshall, William C. Baker.

174. Steubenville (Jefferson Co.), Ohio. (area about the same as last 2 years; Union Cemetery gate through cemetery and area south of Sunset Blvd. to near Lovers Lane, to north side of Sunset Blvd. and Wills Creek area to the Ohio River, over hill to golf course, across golf course, over Brady Ave. to starting place; deciduous woods 48%, bushy meadows and pastures 13%, hemlock grove 5%, creek bottomland 14%, bushy woods or underbrush 12%, urban 8%). — Dec. 27; 8:45 a.m. to 5 p.m. Cloudy; temp. 28°; wind W, 1-5 m.p.h. Six observers, 2 parties part time. Total hours, 13; total miles, 20. Cooper's hawk, 1; sparrow hawk, 1; yellow-shafted flicker, 2; hairy woodpecker, 1; downy woodpecker, 17; Am. crow, 1; Carolina chickadee, 56; tufted titmouse, 34; white-breasted nuthatch, 3; brown creeper, 1; Carolina wren, 3; robin, 2; golden-crowned kinglet, 1; ruby-crowned kinglet, 1; starling, 112; myrtle warbler, 1; English sparrow, 93; cardinal, 56; Am. goldfinch, 2; slate-colored junco, 128; tree sparrow, 53; field sparrow, 18; song sparrow, 61. **Total,** 23 species; 648 individuals. — Albert Tenney, Lois Lee Tenney, John Haese, Richard Banks, Don Rarey, Clinton S. Banks (Forest Audubon Club).

175. Sugar Grove, Ohio (same locality as last 3 years; about 850 acres in the unglaciated Appalachian Plateau; Hocking River and Clear Creek bottoms and adjacent uplands; open bottomlands 42%, mixed upland woodland 19%, hemlock forest 13%, old-field pine-scrub 7%, mixed scrub 6%, southern yellow pine woods 5%, village 5%, country estate 3%). — Dec. 28; dawn to dusk. Partly cloudy to fair; temp. 23° to 31°, wind W, 6-14 m.p.h. Ground about half bare with snow in shaded places. Twenty-six observers in 4 parties. Total hours, 104 (on foot); total miles, 109 (on foot). Turkey vulture, 1; Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 1; Am. rough-legged hawk, 1; marsh hawk, 1; sparrow hawk, 3; ruffed grouse, 11; bob-white, 32; ring-necked pheasant, 1; mourning dove, 8; screech owl, 1; barred owl, 2; yellow-shafted flicker, 23; pileated woodpecker, 8; red-bellied woodpecker, 35; yellow-bellied sapsucker, 1; hairy woodpecker, 16; downy woodpecker, 107; eastern phoebe, 2; horned lark, 5; blue jay, 11; Am. crow, 1; Carolina chickadee, 205; tufted titmouse, 164; white-breasted nuthatch, 48; brown creeper, 48; winter wren, 36; Bewick's wren, 1; Carolina wren, 46; robin, 410; hermit thrush, 57; eastern bluebird, 65; golden-crowned kinglet, 132; ruby-crowned kinglet, 1; starling, 647; myrtle warbler, 4; palm warbler, 1; English sparrow, 438; eastern meadowlark, 80; rusty blackbird, 2; bronzed grackle, 30; cowbird, 8; cardinal, 259; purple finch, 12; eastern goldfinch, 113; eastern towhee, 43; slate-colored junco, 688; tree sparrow, 402; field sparrow, 2; white-throated sparrow, 10; song sparrow, 243. **Total,** 52 species; 4469 individuals. — F. B. Chapman, A. H. Claugus, C. A. Dambach, G. Gilbert, C. R. Goslin, D. M. Harlor, J. C. Harlor,

L. E. Hicks, J. H. Jenkins, S. M. Jepsen, W. K. Jones, W. Jones, A. S. Kiefer, D. L. Leedy, R. H. McCormick, J. Olsen, G. Petrides, C. R. Reese, I. B. Rickly, D. M. Smith, E. S. Thomas, W. A. Tucker, C. F. Walker, W. H. Walker, K. Westerskov, R. H. Wilson (Wheaton Club, members and guests).

176. Toledo, Ohio (4 miles of Swan Creek Valley, 5 miles of Ottawa River Valley, isolated forests east of city, Cedar Point Marsh, Maumee River, Acme Power House to Bay, all in Ohio and Erie Marsh, Michigan. The last mentioned area contains a large flowing mineral spring; open water 5%, cultivated fields 5%, cattail marsh 10%, open deciduous forest 80%). — Dec. 21; dawn to dusk. Cloudy in a.m.; clear in p.m.; temp. 26° to 34° to 31°; wind NW, 5-10 m.p.h.; 4-in. snow; Maumee Bay and marshes frozen. Twenty-three observers in 7 parties. Total hours, 40; total miles, 96 (48 on foot, 48 by auto). Great blue heron, 3; black-crowned night heron, 1; Canada goose, 60; mallard, 910; black duck, 452; baldpate, 10; pintail, 70; canvas-back, 1; lesser scaup duck, 22; Am. golden-eye, 100; ruddy duck, 1; hooded merganser, 5; Am. merganser, 108; sharp-shinned hawk, 2; Cooper's hawk, 4; red-tailed hawk, 6; red-shouldered hawk, 1; Am. rough-legged hawk, 2; bald eagle, 4; marsh hawk, 7; sparrow hawk, 7; ring-necked pheasant, 194; Am. coot, 10; killdeer, 1; great black-backed gull, 2; herring gull, 420; ring-billed gull, 400; Bonaparte's gull, 200; mourning dove, 21; screech owl, 11; barred owl, 2; yellow-shafted flicker, 8; hairy woodpecker, 2; downy woodpecker, 80; horned lark, 1; blue jay, 56; Am. crow, 73; black-capped chickadee, 37; tufted titmouse, 55; white-breasted nuthatch, 36; brown creeper, 23; winter wren, 11; Carolina wren, 4; long-billed marsh wren, 1 (Collins, Sr. and Jr., Burget, Murphy); robin, 1; hermit thrush, 1; golden-crowned kinglet, 21; cedar waxwing, 6; starling, 375; myrtle warbler, 14 (two parties); yellow-throat, 1 (female near spring, Mayfield, Stophlet); English sparrow, 692; eastern meadowlark, 14; red-wing, 1; cardinal, 152; purple finch, 17; common redpoll, 8; pine siskin, 3; eastern goldfinch, 52; eastern towhee, 3; slate-colored junco, 403; tree sparrow, 380; field sparrow, 3; white-throated sparrow, 4; fox sparrow, 1; swamp sparrow, 33; song sparrow, 313; snow bunting, 200. **Total,** 68 species; 6122 individuals. (An immature gannet was caught alive, Dec. 22 in Toledo by K. Mowery.) — Laurel Van Camp, Louis Klewer, Louis W. Campbell, Fred Stearns, Max Shepherst, Harold Mayfield, Thomas Brindley, John Stophlet, Jos. Collins, Sr., Jos. Collins, Jr., Russell Burget, John Murphy, Robert Montgomery, James Nessle, Lawrence Hiett, Jack Brace, Don Wixsom, Fred Flickinger, Ernest Weaver, Robert VanGundy, Seymour VanGundy, Seymour Holloway, Charles Holloway.

177. Van Wert, Ohio (same area as last year; open farm-land 25%, deciduous swamp forest 75%). — Dec. 21; 8 a.m. to 4:30 p.m. Sky overcast; temp. 25° to 32° F.; wind W, 5-9 m.p.h.; ground covered with 3-in. snow, drifts to 2 feet. Five observers separately. Total hours, 30; total miles, 32 (on foot). European partridge, 1; bob-white, 19; ring-necked pheasant, 3; mourning dove, 4; screech owl, 1; barred owl, 1; yellow-shafted flicker, 1; hairy woodpecker, 1; downy woodpecker, 13; blue jay, 6; Am. crow, 96; tufted titmouse, 30; white-breasted nuthatch, 14; starling, 25; myrtle warbler, 3; English sparrow, 85; eastern meadowlark, 10; cardinal, 5; Savannah sparrow, 5 (E. E. G.); slate-colored junco, 4; tree sparrow, 123; song sparrow, 13. **Total,** 22 species; 463 individuals. — E. E. Good, Harold M. Walter, Richard Good, George Brooks, Arthur S. Brooks.

178. Youngstown, Ohio (Meander Lake Conservation area, Mill Creek Park and Mill Creek valley south to North Lima Road, Yellow Creek, Poland to Woodworth and vicinity, Pine Lake — same territory covered since 1933; open farmland 60%, wooded areas 30%, cattail marsh 10%). — Dec. 21; 8 a.m. to 5 p.m. Fair; temp. 36° to 38°; wind W, light; ground bare; most lakes and streams frozen. Fifteen observers in 5 parties. Total hours, 37; total party-miles afoot, 35. Great blue heron, 1; Canada goose, 28; mallard, 130; black duck, 1200 (est.); baldpate, 1; canvas-back, 1; Am. golden-eye, 2; white-winged scoter, 3; ruddy duck, 1; Am. merganser, 3; Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 2; bald eagle, 1; marsh hawk, 1; duck hawk, 1; sparrow hawk, 5; bob-white, 1; ring-necked pheasant, 2; herring gull, 3; ring-billed gull, 1; Bonaparte's gull, 3; mourning dove, 33; barn owl, 3; horned owl, 1; barred owl, 1; short-eared owl, 1; belted kingfisher, 2; yellow-shafted flicker, 8; pileated woodpecker, 4; red-bellied woodpecker, 5; hairy woodpecker, 10; downy woodpecker, 47; horned lark, 150 (northern, 80; prairie, 70); blue jay, 62; Am. crow, 892; black-capped chickadee, 56; tufted titmouse, 66; white-breasted nuthatch, 64; brown creeper, 8; golden-crowned kinglet, 20; cedar waxwing, 1; starling, 220; myrtle warbler, 1; English sparrow, 520; red-wing, 50; rusty blackbird, 12; cowbird, 8; bronzed grackle, 1; cardinal, 73; Am. goldfinch, 57; eastern towhee, 16; pine siskin, 20; slate-colored junco, 159; tree sparrow, 316; song sparrow, 16; Lapland longspur, 1; snow bunting, 1. **Total,** 58 species (1 additional subspecies); 4298 individuals. (About noon the eagle pursued and caught the ruddy duck.) — Paul Stewart, Albert Hartley, Lyle Miller, Frank Ferris, Harold Johnson, Evan Dressel, H. O. Heimerdinger, W. H. Findley, Jerry Brody, Ed Minich, John Barrow, Vincent McLaughlin, John Cook, Margaret Cook, Grant Cook.

179. Charleston, W. Va. (suburbs, Great Kanawha River Valley and adjacent hills and valleys from Marmet to Institute, Elk River and vicinity from Big Chimney to Charleston; open farmland

and grassland 20%, wooded river bottomland 10%, deciduous woodland 65%, pine woodland 5%). — Dec. 28; 6:45 a.m. to 6:00 p.m. Slightly cloudy to clear; temp. 32° to 33° F.; wind N to W, 5-7 m.p.h.; ground bare; water open. Twenty-five observers in 13 parties. Total hours, 76, (72 on foot, 4 by car); total miles, 193 (60 on foot, 133 by car). Black duck, 1; sharp-shinned hawk, 3; Cooper's hawk, 2; red-tailed hawk, 1; red-shouldered hawk, 1; sparrow hawk, 15; ruffed grouse, 3; bob-white, 22 (3 coveys); killdeer, 2; belted kingfisher, 1; yellow-shafted flicker, 7; pileated woodpecker, 2; red-headed woodpecker, 2; hairy woodpecker, 8; downy woodpecker, 58; eastern phoebe, 1; horned lark, 16; blue jay, 11; Am. crow, 46; chickadee [sp.], 299; tufted titmouse, 172; white-breasted nuthatch, 31; brown creeper, 4; winter wren, 15; Carolina wren, 80; mockingbird, 5; robin, 8; hermit thrush, 27; eastern bluebird, 35; golden-crowned kinglet, 29; ruby-crowned kinglet, 5; Am. pipit, 3; starling, 398; myrtle warbler, 15; pine warbler, 1; palm warbler (western), 2; English sparrow, 279; eastern meadowlark, 8; red-wing, 4; grackle, 1; cardinal, 208; Am. goldfinch, 164; eastern towhee, 178; slate-colored junco, 420; tree sparrow, 145; chipping sparrow, 1; field sparrow, 375; white-crowned sparrow, 1; white-throated sparrow, 569; fox sparrow, 7; swamp sparrow, 3; song sparrow, 317. **Total,** 52 species; 4011 individuals. (Seen in area during period: mourning dove, 1; screech owl, 1; barn owl, 1; red-bellied woodpecker, 1; Cape May warbler, 1.) — Wayne Bailey, Sybil Ball, Lucy Barber, Sarah Barber, W. R. DeGarmo, Mr. and Mrs. Julian Dusi, Richard England, Mr. and Mrs. John Handlan, C. O. Handley, Sr., C. O. Handley, Jr., John Handley, Mrs. Arthur Hudson, Dr. and Mrs. Robert Ketchum, Betty Leftwich, James McCarty, Gladys Murrey, E. A. Seaman, Alston B. Shields, Eleanor Sims, William F. Strunk, Wendell Swank, Mrs. W. W. Trent (members of Brooks Bird Club).

180. Huntington, W. Va. (same area as 1940 and subsequent counts; open fields, deciduous woodlands, mixed conifers, river, feeding trays, and parks). — Dec. 25; 7:30 a.m. to 4:00 p.m. Sky heavy overcast, partially cleared at 4 p.m.; temp. 29° to 38°; wind NW, 15-20 m.p.h.; vegetation heavy with frost until 10 a.m. Twenty-seven observers in 8 parties. Total hours, 39; total miles, 86 (36 on foot; 50 by car). Sharp-shinned hawk, 1; sparrow hawk, 1; bob-white, 12; killdeer, 23; mourning dove, 3; yellow-shafted flicker, 28; pileated woodpecker, 2; red-bellied woodpecker, 1; yellow-bellied sapsucker, 2; hairy woodpecker, 9; downy woodpecker, 46; blue jay, 35; Am. crow, 75; Carolina chickadee, 218; tufted titmouse, 198; white-breasted nuthatch, 10; brown creeper, 6; winter wren, 2; Carolina wren, 85; mockingbird, 6; robin, 80; hermit thrush, 7; eastern bluebird, 43; golden-crowned kinglet, 4; starling, 89; myrtle warbler, 32; English sparrow, 337; eastern meadowlark, 1; cardinal, 194; purple finch, 4; Am. goldfinch, 85; eastern towhee, 127; slate-colored junco, 318; tree sparrow, 36; field sparrow, 17; white-throated sparrow, 95; fox sparrow, 1; song sparrow, 115. **Total,** 38 species; 2348 individuals. — Mrs. W. H. Odell, Mrs. Fred Varney, James Dunkle, Laurence Garges, Larry Garges, N. Bayard Green, Mrs. Walter Kerr, Mrs. J. J. Kail, Mrs. Marcus Crenshaw, Mrs. H. A. Resener, Hugh Land, Miss Lois Garrett, Mrs. Minnie Halstead, Mrs. June Baker, Miss Rachael Wilson, Mrs. Grady Risen, Geo. H. Gunnoe, Mrs. M. E. Beckett, Mrs. Row Wells, Mrs. Wm. Scrivinger, Mrs. Iva Nowlan, Mrs. Vada McWilliams, Mrs. H. C. Hale, Miss Nell Rose Hale, James Shires, Mrs. Thomas Linten, Ralph M. Edeburn (Huntington Bird Study Club).

181. Morgantown, W. Va. (edge of town to Cheat Lake, 6 miles away, with skirting of lake shore and side trips into areas adjacent to main highways; open farmlands and deciduous woodlands, about the same territory as worked in previous counts). — Dec. 28; dawn to almost dusk. Fair but cool; temp. 30° to 35°; ground covered with snow; lake frozen with exception of small watering hole for ducks. Six observers, parties of 3, 2, 1 working in different areas. Total party-hours, 12; total mileage, 36 (20 by car, 16 on foot). Mallard, 10; black duck, 146; sharp-shinned hawk, 1; red-shouldered hawk, 1; mourning dove, 4; yellow-shafted flicker, 5; red-bellied woodpecker, 2; hairy woodpecker, 3; downy woodpecker, 17; blue jay, 5; Am. crow, 19; chickadee [sp.], 45; tufted titmouse, 38; white-breasted nuthatch, 7; brown creeper, 1; winter wren, 3; Carolina wren, 20; hermit thrush, 3; eastern bluebird, 8; starling, 247; English sparrow, 268; cardinal, 43; Am. goldfinch, 74; slate-colored junco, 73; tree sparrow, 83; song sparrow, 48. **Total,** 26 species; 1174 individuals. — I. B. Boggs, Herman and Lucretia Bowers, Earl and Rhea Smith, Wayne Davis.

182. Mt. Lookout (Nicholas Co.), W. Va. (same area as in 1941 and later counts; deciduous and hemlock woodland 74%, pine grove 1%, farmland 25%). — Dec. 26. Clear most of day; temp. 30° F.; wind S, 7-20 m.p.h.; some snow on ground. Two observers, separate in a.m., together in p.m. Total hours, 14; total miles, 17 (on foot). Ruffed grouse, 4; pileated woodpecker, 2; red-bellied woodpecker, 3; hairy woodpecker, 3; downy woodpecker, 7; Am. crow, 81; chickadee [sp.], 3; tufted titmouse, 38; white-breasted nuthatch, 3; winter wren, 5; Carolina wren, 2; robin, 5; golden-crowned kinglet, 4; English sparrow, 12; cardinal, 1; slate-colored junco, 175; tree sparrow, 11; song sparrow, 8. **Total,** 18 species; 367 individuals. (Seen in area during period: sharp-shinned hawk, 1; bob-white, 12; horned lark, 12; eastern meadowlark, 14.) — W. C. Legg, Alton McClung.

183. Wheeling (Ohio Co.), W. Va. (city proper; Ohio River, Warwood to Wheeling, Oglebay Park, Miller's Hollow, Big Wheeling Creek Valley; open

farmland and fields 20%, deciduous woods 25%, mixed conifers 5%, brushy roadsides 20%, along Ohio River 10%, along Big Wheeling Creek 10%, city proper 10%). — Dec. 28; 9 a.m. to 5:15 p.m. Overcast with light snow flurries, clearing in late p.m.; temp. 28° to 32°; wind NW, 10-15 m.p.h.; 3-4-in. snow covered ground, water mostly frozen over except Ohio River. Ten observers in 4 parties. Total hours, 18½ (15½ on foot, 3 by car); total miles, 50 (21 on foot, 29 by car). Red-tailed hawk, 2; ruffed grouse, 1; mourning dove, 1; screech owl, 1; belted kingfisher, 1; yellow-shafted flicker, 3; red-bellied woodpecker, 3; yellow-bellied sapsucker, 1; hairy woodpecker, 2; downy woodpecker, 40; Am. crow, 363; Carolina chickadee, 137; tufted titmouse, 111; white-breasted nuthatch, 5; brown creeper, 11; winter wren, 5; Carolina wren, 16; mockingbird, 1; eastern bluebird, 2; golden-crowned kinglet, 6; starling, 41; English sparrow, 97; cardinal, 79; Am. goldfinch, 6; slate-colored junco, 100; tree sparrow, 97; field sparrow, 1; white-throated sparrow, 2; song sparrow, 46. **Total,** 29 species; 1181 individuals. — Carolyn Conrad, Elizabeth Etz, Helen McElwee, Bill Wylie, Karl Haller, Earl Vanscoy, Bob McCausland, Charles Conrad, Mr. and Mrs. George Breiding (The Brooks Bird Club).

184. Bowling Green, Ky. (Albert Covington, McElroy and Chaney Farms, Three Springs Marsh; stream banks 5%, open woods 35%, thickets 15%, old fields 20%, pastures and cultivated fields 25%). — Dec. 21; 6:15 a.m. to 5 p.m. Clear; temp. 28° F.; wind N, 1-7 m.p.h.; ground bare; very heavy frost on vegetation. Total hours, 10¾ (on foot); total miles 10. Red-tailed hawk, 1; red-shouldered hawk, 1; sparrow hawk, 2; killdeer, 2; Wilson's snipe, 13; herring gull, 1; mourning dove, 29; yellow-shafted flicker, 10; pileated woodpecker, 1; red-bellied woodpecker, 7; red-headed woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 11; horned lark, 13; blue jay, 35; Am. crow, 25,000 (est. at roost); Carolina chickadee, 30; tufted titmouse, 17; brown creeper, 2; winter wren, 1; Carolina wren, 20; mockingbird, 13; robin, 3; hermit thrush, 4; eastern bluebird, 55; cedar waxwing, 1; starling, 517; English sparrow, 207; eastern meadowlark, 3; cardinal, 93; Am. goldfinch, 44; eastern towhee, 23; slate-colored junco, 85; field sparrow, 39; white-crowned sparrow, 128; white-throated sparrow, 154; song sparrow, 16. **Total,** 37 species; approximately 26,583 individuals. (Seen in area during period: mallard, wood duck, turkey vulture, Am. rough-legged hawk, marsh hawk, bob-white, yellow-bellied sapsucker, eastern phoebe, white-breasted nuthatch, golden-crowned kinglet, myrtle warbler, purple finch, tree sparrow, fox sparrow, swamp sparrow.) — Charles L. Taylor, Gordon Wilson.

185. Louisville, Ky. (Ohio River from the Falls of the Ohio to Twelve Mile Island, inland about 12 miles to Anchorage, Fern Creek, Goshen, Prospect and Valley, including Cherokee, Iriquois and Seneca Parks; Ohio River and banks 20%, fields and farmland 30%, brushy fields and new growth 35%, deciduous woodland 15%). — Dec. 21; 5:30 a.m. to 5 p.m. Cloudy at start, clearing at 1 p.m.; temp. 30° at start, 35° at return; wind N, 8-12 m.p.h. at start, and S, 1-7 m.p.h. at return. Forty-one observers in 14 parties. Total hours, 123 (76 on foot, 31 by car, 16 by boat); total party-miles, 186 (44 on foot, 131 by car, 11 by boat). Common loon, 2; horned grebe, 7; great blue heron, 1; mallard, 296; black duck, 524; pintail, 6; baldpate, 6; ring-necked duck, 62; canvas-back, 9; lesser scaup duck, 218; Am. golden-eye, 62; buffle-head, 8; ruddy duck, 5; hooded merganser, 11; Am. merganser, 39; turkey vulture, 2; black vulture, 9; sharp-shinned hawk, 2; Cooper's hawk, 5; red-tailed hawk, 8; red-shouldered hawk, 3; bald eagle, 2; marsh hawk, 8; duck hawk, 1; sparrow hawk, 33; bob-white, 43; killdeer, 3; Wilson's snipe, 2; herring gull, 193; ring-billed gull, 77; mourning dove, 123; barred owl, 1; belted kingfisher, 8; yellow-shafted flicker, 48; pileated woodpecker, 5; red-bellied woodpecker, 32; yellow-bellied sapsucker, 5; hairy woodpecker, 12; downy woodpecker, 47; eastern phoebe, 6; horned lark, 104; blue jay, 64; Am. crow, 368; Carolina chickadee, 91; tufted titmouse, 98; white-breasted nuthatch, 28; brown creeper, 11; winter wren, 4; Carolina wren, 43; mockingbird, 48; robin, 16; hermit thrush, 6; eastern bluebird, 85; golden-crowned kinglet, 17; ruby-crowned kinglet, 8; cedar waxwing, 39; migrant shrike, 2; starling, 12,500 (est.); myrtle warbler, 24; palm warbler, 1; English sparrow, 458; eastern meadowlark, 138; red-wing, 8; cardinal, 387; purple finch, 7; Am. goldfinch, 44; eastern towhee, 68; vesper sparrow, 9 (observed at close range — C. C. C., W. H. S.); slate-colored junco, 379; tree sparrow, 88; field sparrow, 21; white-crowned sparrow, 17; white-throated sparrow, 159; fox sparrow, 2; swamp sparrow, 9; song sparrow, 110. **Total,** 76 species; approximately 17,395 individuals. (Seen in area within week: green-winged teal, redhead, Am. coot, screech owl, horned owl. The absence of red-headed woodpeckers is striking as there is a good beech-nut crop this year.) — Mrs. James Bartman, Patricia Beasley, Leonard C. Brecher, Mary Louise Brecher, Hayward Brown, Roberta Burkhardt, Sam Carney, Floyd S. Carpenter, Carl C. Cornett, James Covert, Jacob P. Doughty, James Fetter, Perry Frazar, Tom Fuller, Paxton Gibbs, Walter Gibbs, Walter Jackson, Karl Jenks, Virginia Jones, Ethel W. Lovell, Harvey Lovell, John H. Lovell, H. C. Mitchell, William Mitchell, Burt L. Monroe, Jr., Burt L. Monroe, Sr., L. H. Pieper, Marie Pieper, Paul Powell, Evelyn Schneider, Walter H. Shackleton, Cliff Sipe, Jerry Smith, Mrs. Anne Stamm, Robert Steilberg, Don Summerfield, Fan Tabler, S. Charles Thacher, Mrs. S. C. Thacher, Florence Wiggins, Audrey Wright (Beckham Chapter, Kentucky Ornithological Society).

186. Mammouth Cave National Park, Ky. (Doyle Valley, Sloan's Crossing, Joppa Ridge, Hotel area, pump houses, Cedar Sink; stream banks 5%, woods 40%, ponds and marshes 15%; old fields 40%). — Dec. 26; 6:45 a.m. to 4:15 p.m. Clear except first 2 hours; temp. 30° to 45°; wind W, 1-7 m.p.h.; ground bare. Two parties until 12:30 p.m.; then 1 party. Total hours, 9½; total miles, 8 (on foot). Mallard, 2; wood duck, 1; turkey vulture, 1; red-tailed hawk, 3; bob-white, 23; yellow-shafted flicker, 13; pileated woodpecker, 8; red-bellied woodpecker, 5; yellow-bellied sapsucker, 1; hairy woodpecker, 3; downy woodpecker, 9; eastern phoebe, 1; blue jay, 18; Am. crow, 19; Carolina chickadee, 17; tufted titmouse, 18; white-breasted nuthatch, 2; brown creeper, 1; winter wren, 1; Carolina wren, 6; mockingbird, 2; robin, 34; hermit thrush, 11; eastern bluebird, 50; golden-crowned kinglet, 1; cedar waxwing, 42; myrtle warbler, 10; English sparrow, 26; cardinal, 33; purple finch, 80; Am. goldfinch, 20; eastern towhee, 11; slate-colored junco, 134; tree sparrow, 2; field sparrow, 24; white-throated sparrow, 21; fox sparrow, 1; swamp sparrow, 16; song sparrow, 11. **Total,** 39 species; 681 individuals. (Most species were far below their normal numbers.) — Henry W. Lix, (Park Naturalist), Jimmy Liles, Gordon Wilson.

187. Otter Creek Park (Meade Co.), Ky. (deciduous woods 75%, brushy fields 15%, Ohio River from bank 10%). — Dec. 28. Fair; temp. 28° to 45° F.; no wind; streams open but ponds frozen. Three observers in 2 parties. Total hours, 11 (on foot); total miles, 11. Common loon, 5; wood duck, 1 (a crippled ♀ on Otter Creek — H. B. L.); black vulture, 1; bald eagle, 3; sparrow hawk, 1; horned owl, 1 (about 5 miles south of the park); yellow-shafted flicker, 9; pileated woodpecker, 7; red-bellied woodpecker, 6; yellow-bellied sapsucker, 3; hairy woodpecker, 2; downy woodpecker, 7; blue jay, 6; Am. crow, 32; Carolina chickadee, 33; tufted titmouse, 28; white-breasted nuthatch, 8; brown creeper, 1; winter wren, 2; Carolina wren, 14; mockingbird, 3; robin, 62; hermit thrush, 9; eastern bluebird, 14; golden-crowned kinglet, 14; cedar waxwing, 104; starling, 1; myrtle warbler, 13; English sparrow, 2; cardinal, 39; purple finch, 1; Am. goldfinch, 22; eastern towhee, 26; slate-colored junco, 58; field sparrow, 6; white-throated sparrow, 6; fox sparrow, 7; swamp sparrow, 11; song sparrow, 3. **Total,** 39 species; 571 individuals. (Seen in area during week: meadowlark, bob-white.) A large crop of wild grapes was the attraction for the robins and cedar waxwings. — Harvey B. Lovell, Floyd Carpenter, Evelyn Schneider (Kentucky Ornithological Society).

188. Paducah, Ky. (same territory as in 1946, along the Ohio and Tennessee Rivers 5 miles south and 3 miles northwest of Paducah; deciduous woodland 40%, stream banks 10%, brushy fields 30%, open fields and pastures 20%). — Dec. 22; 7:30 a.m. to 5 p.m. Foggy until noon, clear in p.m.; temp. 28° to 40°; wind SW, 1-5 m.p.h. Total hours, 8½ (on foot); total miles, 22 (7 on foot, 15 by car). Lesser scaup duck, 2; sparrow hawk, 3; herring gull, 13; mourning dove, 2; yellow-shafted flicker, 5; red-bellied woodpecker, 10; red-headed woodpecker, 4; yellow-bellied sapsucker, 2; hairy woodpecker, 3; downy woodpecker, 2; blue jay, 23; Am. crow, 3; black-capped chickadee, 13; tufted titmouse, 21; white-breasted nuthatch, 1; winter wren, 2; Carolina wren, 3; mockingbird, 4; robin, 1; eastern bluebird, 2; cedar waxwing, 4; loggerhead shrike, 1; starling, 10,073; English sparrow, 45; eastern meadowlark, 4; bronzed grackle, 2; cowbird, 75; cardinal, 17; pine siskin, 17 (seen at 30 feet with 6X glasses); Am. goldfinch, 12; eastern towhee, 15; slate-colored junco, 38; tree sparrow, 37; white-throated sparrow, 4; song sparrow, 3. **Total,** 35 species; about 10,466 individuals. (Approximately 10,000 starlings were observed at 4:50 p.m. at their roost on the overhead spans of the mile-long Ohio River bridge between Paducah, Kentucky and Brookport, Illinois.)—E. Esther Smith.

189. Elizabethton, Tenn. (same area as in 1946; Watauga and Doe Rivers, Buffalo and Gap Creeks; stream borders 60%, woodlands 25%, open fields 15%). — Dec. 21; 7:30 a.m. until 5 p.m. Clear; temp. 27° at start, 40° at end; wind, calm. Thirteen observers in 9 parties. Total hours, 41; total miles, 44 (on foot). Lesser scaup duck, 1; hooded merganser, 1; Cooper's hawk, 2; red-tailed hawk, 1; sparrow hawk, 3; killdeer, 4; mourning dove, 20; belted kingfisher, 4; yellow-shafted flicker, 5; pileated woodpecker, 1; red-bellied woodpecker, 1; yellow-bellied sapsucker, 4; hairy woodpecker, 4; downy woodpecker, 24; horned lark, 26; blue jay, 29; Am. crow, 152; Carolina chickadee, 86; tufted titmouse, 37; brown creeper, 2; winter wren, 3; Carolina wren, 52; mockingbird, 14; robin, 1; hermit thrush, 3; eastern bluebird, 54; golden-crowned kinglet, 17; ruby-crowned kinglet, 5; cedar waxwing, 24; loggerhead shrike, 2; myrtle warbler, 62; starling, 197; palm warbler (western), 2; yellow-throat, 1 (observed at 12 feet in good light — L.R.H.); English sparrow, 139; eastern meadowlark, 2; bronzed grackle, 8; cardinal, 86; purple finch, 6; pine siskin, 3; Am. goldfinch, 58; eastern towhee, 12; slate-colored junco, 69; field sparrow, 62; white-crowned sparrow, 26; white-throated sparrow, 86; fox sparrow, 9; song sparrow, 89. **Total,** 48 species; 1499 individuals. — Fred W. Behrend, S. C. Browning, Mary Cook, Hugo Doob, Jr., Mr. and Mrs. Thomas W. Finucane, Dr. and Mrs. Lee R. Herndon, Mr. and Mrs. George K. Leonard, Wm. A. Sutherland, Mr and Mrs. Gordon E. Thomas (Elizabethton Chapter, Tennessee Ornithological Society).

190. Great Smoky Mountains National Park, Tenn. (same area as in past 10 years; circle with 7½ mile radius centering on Bull Head of Mt. LeConte, including a section of the Tennessee-North

Carolina divide from Collins Gap to Mt. Kephart; towns of Gatlinburg and Pigeon Forge; open farmland 25%, deciduous forest 25%, spruce forest 20%, abandoned fields 20%, towns and suburbs 10%). — Dec. 28; 7:15 a.m. to 8:00 p.m. Clear throughout the day; temp. 29° to 57°; wind variable, mostly easterly, strong at high altitudes in a.m., light in p.m.; ground frozen in a.m., covered with snow blanket in woods above 4000 ft. Altitude range 1200 to 6000 ft. Twenty-six observers in 9 parties. Total party-hours, 73; total miles, 385 (325 by car, 60 on foot). Great blue heron, 1; turkey vulture, 15; Cooper's hawk, 2; red-tailed hawk, 4; sparrow hawk, 2; ruffed grouse, 4; wild turkey, 6; killdeer, 22; Wilson's snipe, 2; mourning dove, 85; screech owl, 1; belted kingfisher, 4; pileated woodpecker, 5; yellow-bellied sapsucker, 3; hairy woodpecker, 5; downy woodpecker, 15; eastern phoebe, 15; horned lark, 13; blue jay, 10; raven, 7; Am. crow, 330 (est.); chickadee (both black-capped and Carolina observed), 345 (est.); tufted titmouse, 29; white-breasted nuthatch, 3; red-breasted nuthatch, 31; brown creeper, 14; winter wren, 9; Bewick's wren, 1; Carolina wren, 20; mockingbird, 9; robin, 160 (est.); hermit thrush, 9; eastern bluebird, 67; golden-crowned kinglet, 79; ruby-crowned kinglet, 4; Am. pipit, 75 (est.); loggerhead shrike, 1; starling, 85; myrtle warbler, 7; English sparrow, 51; eastern meadowlark, 55; red-wing, 9; cowbird, 15; cardinal, 72; purple finch, 7; pine siskin, 2; Am. goldfinch, 155 (est.); red crossbill, 4; eastern towhee, 45; Savannah sparrow, 18; slate-colored junco (both typical slate-colored and Carolina represented), 320 (est.); field sparrow, 440 (est.); white-throated sparrow, 270 (est.); fox sparrow, 1; swamp sparrow, 7; song sparrow, 190 (est.). **Total,** 57 species (1 additional subspecies); approximately 3160 individuals. — Mrs. Juanita Allen, Fred W. Behrend, Mr. and Mrs. Harvey Broome, Mary Ruth Chiles, Brockway Crouch, Edward W. Dougherty, Mr. and Mrs. Robert J. Dunbar, Thos. W. Finucane, Mr. and Mrs. Harry Henry, Dr. Lee R. Herndon, William M. Johnson, Mrs. Frank Leonhard, B. Franklin McCamey, Jr., Mr. and Mrs. Robert A. Monroe, S. A. Ogden, Myrtle M. Seno, Donald C. Snoddy, Arthur Stupka, Dr. James T. Tanner, Rowan Togue, Paul Yambert, William Yambert (members and guests, Tennessee Ornithological Society and National Park Service).

191. Greenville, Tenn. (circle of 7½-mile radius about town, including Reed Farm along Roaring Fork Creek, Lick Creek, Bay's Mountain at Marvin, Tusculum, Afton, Shiloh, Bird's Bridge Road to the Nolichuckey River, Frank's Creek, Kingsport Road to Cross Anchor, Babb's Mill Road; stream banks 30%, deciduous woods 25%, open fields and thickets 40%, city suburbs 5%). — Dec. 26. Fair; temp. 30° to 36° F.; wind SSW, 20-25 m.p.h. Twelve observers in 4 parties. Total hours, 31; total miles, 35 (15 on foot, 20 by car). Turkey vulture, 19; black vulture, 22; red-shouldered hawk, 2; marsh hawk, 1; sparrow hawk, 5; bob-white, 2 (seen shot by hunters); mourning dove, 31; belted kingfisher, 6; yellow-shafted flicker, 7; pileated woodpecker, 1; red-bellied woodpecker, 3; red-headed woodpecker, 6 (on Tusculum College campus); hairy woodpecker, 1; downy woodpecker, 11, eastern phoebe, 1; horned lark, 37; blue jay, 30; Am. crow, 10,650 (est.); Carolina chickadee, 106; tufted titmouse, 34; white-breasted nuthatch, 2; brown creeper, 1; winter wren, 2; Bewick's wren, 1; Carolina wren, 31; mockingbird, 29; robin, 5; eastern bluebird, 37; golden-crowned kinglet, 12; ruby-crowned kinglet, 2; cedar waxwing, 23; starling, 257; myrtle warbler, 10; palm warbler, 2; English sparrow, 83; eastern meadowlark, 65; rusty blackbird, 20 (observed at 10 feet — Mr. and Mrs. Nevius); grackle, 6; cardinal, 98; indigo bunting, 5 (blue color and small size noted by Mrs. Clemens) [no further details — Ed.]; Am. goldfinch, 19; eastern towhee, 8; slate-colored junco, 60; chipping sparrow, 30; field sparrow, 112; white-crowned sparrow, 89; white-throated sparrow, 68; song sparrow, 75. **Total,** 48 species; approximately 12,127 individuals. — Mr. and Mrs. Willis Clemens, Bobby Doty, Jimmie Don Hankins, Mr. and Mrs. Richard Nevius, Mr. C. M. Shanks, Johnny Shanks, Dan and Allen Vinton, Mr. and Mrs. J. B. White.

192. Memphis, Tenn. (1946 area plus Mound City Chute, slightly more intensive coverage south; wooded bottomlands 45%, deciduous woodlots including city parks 20%, airports, pasture, and old cottonfields 15%, suburban roadsides 20%). — Dec. 21; 6:35 a.m. to 4:45 p.m. Fair; muddy underfoot; temp. 33° to 50° to 37°; calm to light N wind in p.m. Thirty-three observers in 7 parties and 4 individuals, the 4 main parties breaking up variously at localities worked. Total party-hours, 113; total party-miles, 247 (92 on foot, 155 by car). Pied-billed grebe, 3; double-crested cormorant, 9; great blue heron, 2; mallard, 1; ring-necked duck, 1; lesser scaup duck, 14; turkey vulture, 6; black vulture, 28; sharp-shinned hawk, 3; Cooper's hawk, 4; red-tailed hawk, 36; red-shouldered hawk, 15; marsh hawk, 10; sparrow hawk, 47; bob-white, 104; killdeer, 91; Wilson's snipe, 1; herring gull, 1; ring-billed gull, 33; mourning dove, 63; screech owl, 2; horned owl, 1; belted kingfisher, 7; yellow-shafted flicker, 141; pileated woodpecker, 1; red-bellied woodpecker, 62; red-headed woodpecker, 23; yellow-bellied sapsucker, 19; hairy woodpecker, 13; downy woodpecker, 53; eastern phoebe, 1; horned lark, 30; blue jay, 390; Am. crow, 305; Carolina chickadee, 195; tufted titmouse, 90; white-breasted nuthatch, 4; brown creeper, 22; winter wren, 43; Carolina wren, 153; mockingbird, 117; brown thrasher, 19; robin, 180; hermit thrush, 35; eastern bluebird, 103; golden-crowned kinglet, 132; ruby-crowned kinglet, 41; Am. pipit, 3; cedar waxwing, 291; loggerhead shrike, 41; starling, 6379; blue-headed vireo, 1 (B. B. C., D. S., *et al.* — second winter record); myrtle warbler, 393; English spar-

row, 520; meadowlark, 329; red-wing, 554; rusty blackbird, 13; bronzed grackle, 6508; cowbird, 51; unidentified blackbirds, 8670; cardinal, 432; purple finch, 34; Am. goldfinch, 92; eastern towhee, 85; Savannah sparrow, 125; LeConte's sparrow, 5; slate-colored junco, 583; chipping sparrow, 5 (L. Coffey); field sparrow, 218; white-crowned sparrow, 9; white-throated sparrow, 1271; fox sparrow, 70; swamp sparrow, 43; song sparrow, 344; Lapland longspur, 10. **Total,** 74 species; approximately 29-733 individuals. (Ten miles north of area, on the Mississippi, 300 (est.) Canada geese were reported.) — Mr. and Mrs. Ben B. Coffey, Jr., Mr. and Mrs. Howard Barbig, Mrs. Floy Barefield, Edward Balton, Fred T. Carney, Mrs. Irene R. Daniel, Mary Davant, Harry Estes, Newton Hanson, Oliver F. Irwin, Victor Julia, Mr. and Mrs. Luther F. Keeton, Lawrence C. Kent, Paul Kisling, Chas. E. McPherson, Jr., Mrs. J. H. McWhorter, Jim McWhorter, Patricia Moore, Tommy Odum, Eugene Parish, Ruel Patterson, Mr. and Mrs. Albert L. Powell, Ella Ragland, Alice Smith, Demett Smith, Jr., Mrs. M. L. Torti, Maurice Torti, Brother I. Vincent, Rose Woolridge (Memphis Chapter, Tennessee Ornithological Society).

193. Nashville, Tenn. (environs, including Radnor Lake, Overton Hills forest, Leawood, Hobbs to Tyne Lanes, Richland Creek, Harpeth River valley, Warner Parks, Bellemeade, 101 pasture, Davidson Road, Hillwood, River Road, Bell's bend of Cumberland River, Germantown, Shelby Park and Knapp farm; open fields 25%, dense woods 20%, wooded grasslands 30%, thickets and old fields 25%). — Dec. 21; 7 a.m. to 5 p.m. Clear in a.m., overcast in p.m.; temp. 30° to 41°; wind NW, light; ground bare (no snow to date). Twenty-two observers in 8 parties. Total party-hours, 54; total party-miles, 83 (28 on foot, 55 by car). Pied-billed grebe, 1; great blue heron, 3; mallard, 45; black duck, 13; ring-necked duck, 5; turkey vulture, 1; black vulture, 31; Cooper's hawk, 4; red-tailed hawk, 7; red-shouldered hawk, 2; sparrow hawk, 22; bob-white, 24 (2 coveys); Am. coot, 2; killdeer, 81; Wilson's snipe, 1; mourning dove, 231 (125 in 1 field); screech owl, 3; horned owl, 2; barred owl, 1; belted kingfisher, 5; yellow-shafted flicker, 46; pileated woodpecker, 15; red-bellied woodpecker, 45; red-headed woodpecker, 2 (rare in winter); yellow-bellied sapsucker, 18; hairy woodpecker, 12; downy woodpecker, 61; eastern phoebe, 2; horned lark, 7 (doubtless more); blue jay, 54; Am. crow, 908 (partly est.); Carolina chickadee, 145; tufted titmouse, 80; white-breasted nuthatch, 2; brown creeper, 11; winter wren, 1; Bewick's wren, 2; Carolina wren, 74; mockingbird, 92; robin, 125,940 (125,000 at roost); hermit thrush, 8; eastern bluebird, 90; golden-crowned kinglet, 7; ruby-crowned kinglet, 1 (A. R. L.); cedar waxwing, 18; loggerhead shrike, 4; starling, 501,940 (500,000 at roost)*; myrtle warbler, 139; palm warbler, 2 (rare); English sparrow, 100; eastern meadowlark, 107; red-wing, 4; rusty blackbird, 50; bronzed grackle, 1010 (including 1000 est.); cowbird, 850; cardinal, 272; purple finch, 3; Am. goldfinch, 143; eastern towhee, 101; slate-colored junco, 213; field sparrow, 119; white-crowned sparrow, 21; white-throated sparrow, 205; fox sparrow, 7; swamp sparrow, 49; song sparrow, 125. **Total,** 66 species; approximately 633,589 individuals. (Also seen during period: pintail, 1; buffle-head, 4; marsh hawk, 1; herring gull, 1.) *The roost referred to was estimated to contain 500,000 starlings, 125,000 robins and 10 grackles. It was located in a small valley, densely filled with deciduous trees and thickets, about 7 miles northwest of Nashville. — B. H. Abernathy, H. G. Bradley, Tom Butler, Bill Crouch, Steve Fuqua, Albert F. Ganier, Eleanor Gorham, R. M. and Mrs. Hawkins, Helen Howell, Amelia R. Laskey, Barbara Longcrier, Arthur McMurray, G. R. Mayfield, J. A. Robins, Ed. Schreiber, Robert Sollmann, Curtis Sorrells, Walter R. Spofford, H. S. Vaughn, James Wade and Geo. B. Woodring (Nashville Chapter, Tennessee Ornithological Society).

194. Reelfoot Lake, Tenn. (from Tiptonville around lake via Spillway and Samburg to Walnut Log, and also the timbered bottomlands on west side of lake; deciduous woodland 55%, open lake 20%, roadside 15%, farmland 10%). — Dec. 26; 5:30 a.m. to 5:30 p.m. Overcast in the a.m., clear in p.m.; temp. 30° to 45°; wind S to W to N, 0-10 m.p.h. Four observers together. Total hours, 12 (8 on foot, 2½ in rowboat, 1½ in car); total miles, 30 (7 on foot, 3 in rowboat, 20 in car). Pied-billed grebe, 2; great blue heron, 3; Canada goose, 6; mallard, 10,000 (est.); black duck, 1; gadwall, 70; baldpate, 2; green-winged teal, 2; blue-winged teal, 28; shoveller, 24; ring-necked duck, 120; Am. goldeneye, 4; black vulture, 24; red-tailed hawk, 9; red-shouldered hawk, 5; bald eagle, 1; marsh hawk, 4; bob-white, 14; Am. coot, 450; herring gull, 3; ring-billed gull, 14; horned owl, 3; barred owl, 11; belted kingfisher, 3; yellow-shafted flicker, 5; pileated woodpecker, 2; red-bellied woodpecker, 13; red-headed woodpecker, 3; yellow-bellied sapsucker, 7; hairy woodpecker, 1; downy woodpecker, 10; blue jay, 7; Am. crow, 270; Carolina chickadee, 22; tufted titmouse, 7; brown creeper, 6; winter wren, 4; Carolina wren, 16; short-billed marsh wren, 8; mockingbird, 11; golden-crowned kinglet, 8; ruby-crowned kinglet, 2; loggerhead shrike, 3; strarling, 900 (est.); English sparrow, 108; meadowlark, 32; red-wing, 2,000,000 (est., tremendous continuous flocks, streaming in to roost, were observed for ½ hour at dusk); rusty blackbird, 95; bronzed grackle, 69; cowbird, 55; cardinal, 45; Am. goldfinch, 16; eastern towhee, 4; slate-colored junco, 39; field sparrow, 12; white-crowned sparrow, 32; white-throated sparrow, 18; fox sparrow, 10; song sparrow,12. **Total,** 59 species; approximately 2,012,655 individuals. (Seen in area Dec. 27 and 29: double-crested cormorant, 21; turkey vulture, 3; duck hawk, 1; sparrow hawk, 3; killdeer, 2; mourning

dove, 1; screech owl, 1; robin, 7; hermit thrush, 4; eastern bluebird, 3; myrtle warbler, 12.) — James L. Norman, P. W. White, Jr., Thomas Walker, Jr., Lawson Hughes.

195. Birmingham, Ala. (Edgewood Lake, Lake Purdy, Oak Mountain State Park and environs of city including airports; center of area same as in 1944 and subsequent years; mixed hardwoods and pines 50%, lake front 25%, pine woods 5%, uncultivated fields and pastures 20%). — Dec. 20; dawn to dusk. Clear; temp. 28° to 62° to 48°; wind NNE to SSE, 5-15 m.p.h.; ground bare, water level in Lake Purdy 3-4 ft. below normal due to dry fall and increased use of water. Eight observers in 3 parties. Total hours, 34 (33 on foot, 1 in car); total miles, 34 (20 on foot, 14 by car). Horned grebe, 1; pied-billed grebe, 65; great blue heron, 3; mallard, 14; gadwall, 25; baldpate, 1 ♂; pintail, 12; redhead, 5; ring-necked duck, 33; canvas-back, 3; lesser scaup duck, 74; buffle-head, 2; ruddy duck, 71; turkey vulture, 16; black vulture, 6; Cooper's hawk, 1; red-tailed hawk, 3; red-shouldered hawk, 3; marsh hawk, 1; sparrow hawk, 2; Am. coot, 875 (est.); killdeer, 101; Wilson's snipe, 4; mourning dove, 82; screech owl, 1; belted kingfisher, 8; yellow-shafted flicker, 12; pileated woodpecker, 20; red-bellied woodpecker, 18; red-headed woodpecker, 1; yellow-bellied sapsucker, 4; hairy woodpecker, 8; downy woodpecker, 16; eastern phoebe, 7; blue jay, 50; Am. crow, 81; Carolina chickadee, 49; tufted titmouse, 41; white-breasted nuthatch, 8; brown-headed nuthatch, 10; brown creeper, 7; winter wren, 2; Bewick's wren, 6; Carolina wren, 50; mockingbird, 11; brown thrasher, 12; catbird, 1; robin, 57; hermit thrush, 13; eastern bluebird, 76; golden-crowned kinglet, 51; ruby-crowned kinglet, 31; Am. pipit, 106; cedar waxwing, 18; loggerhead shrike, 10; starling, 870 (est.); myrtle warbler, 7; pine warbler, 16; palm warbler, 3; English sparrow, 190 (est.); eastern meadowlark, 282 (est.); red-wing, 10; rusty blackbird, 20; bronzed grackle, 6500 (est., 1 flock); cardinal, 72; purple finch, 1; Am. goldfinch, 64; eastern towhee, 52; Savannah sparrow, 35; vesper sparrow, 26; slate-colored junco, 146; chipping sparrow, 25; field sparrow, 150; white-throated-sparrow, 125; fox sparrow, 7; swamp sparrow, 42; song sparrow, 63. **Total,** 77 species; approximately 10,894 individuals. (Seen Dec. 17: red-breasted merganser, 1; Dec. 19: house wren, 1.) — Thomas A. Imhof, Don Lee, John Lee, Morton H. Perry, M. F. Prather, Robert Rieves, William Walker, F. Bozeman Daniel (Birmingham Audubon Society).

196. Foley, Ala. (north and west of Foley; Magnolia Springs; Bon Secour; coastal areas near Gulf Shores; open water of Mobile Bay 15%, salt-water marshes 5%, shores of Gulf and Mobile Bay 12%, fields (mostly cultivated) 28%, pine-palmetto woods 25%, hardwoods 12%, residential areas 3%). — Dec. 27. Clear; temp. about 35° to 65°; wind N to SSW, 0-15 m.p.h. Five observers in 4 parties. Total hours, 34 (afoot, by car, by boat); total miles, 44 (22 afoot, 18 by car, 4 by boat). Common loon, 86; Holboell's grebe, 1 (large size, dark neck, white cheek patch — M. F. P.); horned grebe, 92; pied-billed grebe, 5; brown pelican, 85; gannet, 12 (all immatures, mottled brown birds, dark face, size of common loon, long pointed wings, dove headlong into water — T. A. I.); double-crested cormorant, 104; great blue heron, 24; gadwall, 4; canvas-back, 2; lesser scaup duck, 20; Am. golden-eye, 300; buffle-head, 12; white-winged scoter, 1 (scoter shape of head and body, uniform dark brown, white patch on wing, light areas on cheeks, 20 yards offshore, 10X glasses; observer familiar with all three species of scoters — T. A. I.); hooded merganser, 10; red-breasted merganser, 2850; turkey vulture, 36; black vulture, 49; Cooper's hawk, 2; red-tailed hawk, 4; red-shouldered hawk, 3; bald eagle, 1; marsh hawk, 3; duck hawk, 3; sparrow hawk, 9; bob-white, 27; clapper rail, 6; piping plover, 1; killdeer, 115; black-bellied plover, 4; Wilson's snipe, 4; sanderling, 4; herring gull, 1000 (est.); ring-billed gull, 350; laughing gull, 2; Bonparte's gull, 55; Forster's tern, 170; royal tern, 175; Caspian tern, 35; mourning dove, 54; ground dove, 1 (M. H. P.); barred owl, 5; belted kingfisher, 9; yellow-shafted flicker, 14; pileated woodpecker, 2; red-bellied woodpecker, 19; red-headed woodpecker, 1; yellow-bellied sapsucker, 4; hairy woodpecker, 7; downy woodpecker, 7; red-cockaded woodpecker, 7; eastern phoebe, 31; blue jay, 52; Am. crow, 3; fish crow, 37; Carolina chickadee, 40; tufted titmouse, 11; brown-headed nuthatch, 11; brown creeper, 1; house wren, 19; Carolina wren, 32; long-billed marsh wren, 15; short-billed marsh wren, 4; mockingbird, 46; catbird, 4; brown thrasher, 25; robin, 220; hermit thrush, 15; eastern bluebird, 63; blue-gray gnatcatcher, 3; golden-crowned kinglet, 3; ruby-crowned kinglet, 48; Am. pipit, 125; cedar waxwing, 10; loggerhead shrike, 29; starling, 426; white-eyed vireo, 3; blue-headed vireo, 5; orange-crowned warbler, 3; myrtle warbler, 230; pine warbler, 102; palm warbler (both races), 82; yellow-throat, 24; English sparrow, 15; eastern meadowlark, 122; red-wing, 5750 (est.); boat-tailed grackle, 12; cowbird, 860; cardinal, 29; Am. goldfinch, 26; eastern towhee, 58; Savannah sparrow, 19; sharp-tailed sparrow, 2; vesper sparrow, 21; pine-woods sparrow, 1 (H. M. S.); chipping sparrow, 40; field sparrow, 25; white-throated sparrow, 31; swamp sparrow, 19; song sparrow, 17. **Total,** 100 species; approximately 14,564 individuals. (Seen just outside area, Dec. 28: Bewick's wren. Large numbers of fish-eating species due to presence of very large school of fish just offshore.) — Bernard Clowdus, Thomas A. Imhof, Morton H. Perry, M. F. Prather, Henry M. Stevenson.

197. Eudora, Miss. (Arkabutla Dam to Eudora to Camp Currier and return; large open lake 15%, earth dam and adjacent fields 10%, shoreline along

estuary 10%, roadside and thickets 25%, deciduous woodland 40%). — Dec. 27; 7 a.m. to 3 p.m. Sunny; temp. 31° to 66°; calm. Four observers together except 2 parties, 1 hour at camp. Total party-miles, 22 (20 by car, 2 on foot). Great blue heron, 5; mallard, 5000 (est.); black duck, 7; Am. golden-eye, 3; turkey vulture, 5; black vulture, 7; sharp-shinned hawk, 1; red-tailed hawk, 4; red-shouldered hawk, 1; marsh hawk, 1; sparrow hawk, 1; Am. coot, 1; killdeer, 9; mourning dove, 5; belted kingfisher, 1; yellow-shafted flicker, 6; pileated woodpecker, 2; red-bellied woodpecker, 8; red-headed woodpecker, 2; yellow-bellied sapsucker, 3; hairy woodpecker, 2; downy woodpecker, 5; eastern phoebe, 3; blue jay, 24; Am. crow, 7; Carolina chickadee, 8; tufted titmouse, 12; winter wren, 1; Bewick's wren, 1; Carolina wren, 4; mockingbird, 9; robin, 5; bluebird, 27; golden-crowned kinglet, 4; ruby-crowned kinglet, 3; loggerhead shrike, 4; starling, 31; myrtle warbler, 14; English sparrow, 11; eastern meadowlark, 46; bronzed grackle, 3; cardinal, 15; purple finch, 1; Am. goldfinch, 23; eastern towhee, 2; Savannah sparrow, 25; slate-colored junco, 120; field sparrow, 20; white-crowned sparrow, 5; white-throated sparrow, 12; song sparrow, 15. **Total,** 51 species; 5534 individuals. — Mr. and Mrs. Ben B. Coffey, Jr., Patricia Moore, Brother I. Vincent.

198. Hickory Flat, Miss. (pine woods west of town, Oklimeter creek bottoms, south to Ebenezer Church, east to Myrtle Tower; pine woods 35%, wooded bottomlands 15%, deciduous woodlots 25%, open fields 25%). — Dec. 24; 1:15 a.m. to 4:15 p.m. Generally overcast; slight wind; temp. 32° to 36°. Observers together. Total miles, 16 (4 on foot, 12 on horseback). Turkey vulture, 3; black vulture, 4; red-tailed hawk, 1; red-shouldered hawk, 2; marsh hawk, 2; killdeer, 2; mourning dove, 12; belted kingfisher, 3; yellow-shafted flicker, 7; pileated woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 6; blue jay, 23; Am. crow, 4; Carolina chickadee, 35; tufted titmouse, 5; brown-headed nuthatch, 1; brown creeper, 6; winter wren, 1; Carolina wren, 12; mockingbird, 1; brown thrasher, 1; robin, 17; hermit thrush, 2; eastern bluebird, 36; golden-crowned kinglet, 9; ruby-crowned kinglet, 1; cedar waxwing, 6; loggerhead shrike, 3; starling, 6; myrtle warbler, 7; pine warbler, 6; English sparrow, 12; eastern meadowlark, 37; bronzed grackle, 8; cardinal, 13; purple finch, 2; Am. goldfinch, 84; eastern towhee, 7; Savannah sparrow, 5; slate-colored junco, 169; field sparrow, 202; white-throated sparrow, 126; swamp sparrow, 16; song sparrow, 24. **Total,** 45 species; 931 individuals. — Mrs. Ben B. Coffey, Jr., Mrs. Floy Barefield, Cooper Barefield.

199. Indianola, Miss. (eastward along wooded bank of Indian Bayou 1 mile; return through open fields and meadows; 1 mile westward in car, roundabout return on foot through outskirts of town, the garbage dump and old brickyard pond and hedgerows). — Dec. 26; 8:30 a.m. to 5:30 p.m. Clear; temp. 30° at start, 55° at sundown; brisk, cold NW wind; film ice on edge of bayou. Total hours, 9; total miles, 5. Great blue heron, 1; black vulture, 14; hawk (Cooper's or sharp-shinned), 1; sparrow hawk, 4; killdeer, 6; mourning dove, 6; barred owl, 2; belted kingfisher, 1; yellow-shafted flicker, 5; red-bellied woodpecker, 1; red-headed woodpecker, 7; flycatcher (sp.), 1; blue jay, 10; brown creeper, 1; winter wren, 3; Carolina wren, 5; mockingbird, 5; brown thrasher, 7; golden-crowned kinglet, 6; cedar waxwing, 25; loggerhead shrike, 1; starling, 100; myrtle warbler, 5; English sparrow, 20; meadowlark 11; purple grackle, 5000 (est.); cardinal, 18; indigo bunting, 13 [no details — Ed.]; purple finch, 3; Am. goldfinch, 18; eastern towhee, 2; slate-colored junco, 5; chipping sparrow, 1; field sparrow, 10; white-throated sparrow, 150; song sparrow, 6. **Total,** 36 species; approximately 5474 individuals. — Townsend Boyer.

200. Moon Lake (Lula), Miss. (same route as 1946, adding old Highway 61 and Road Dundee to Powell with more time in woods; lake from shoreline drive 20%, levee 5%, narrow bayous, timbered 25%, highway and old cotton fields and pasture 10%, weedy fields 20%, wooded bottoms 20%). — Dec. 28; 6:45 a.m. to 5 p.m. Sunny; temp. 35° to 65°; calm. Eleven observers, generally in 3 parties. Total party-hours, 18; total party-miles 90 (10 on foot, 80 by auto). Horned grebe, 18; pied-billed grebe, 15; double-crested cormorant, 192; great blue heron, 8; mallard, 72; baldpate, 2; ring-necked duck, 4; lesser scaup duck, 31; Am. golden-eye, 15; buffle-head, 9; ruddy duck, 4500 (est.); hooded merganser, 183; red-breasted merganser, 17; turkey vulture, 6; black vulture, 57; red-tailed hawk, 2; red-shouldered hawk, 2; marsh hawk, 2; sparrow hawk, 8; bob-white, 11; Am. coot, 95; killdeer, 127; Wilson's snipe, 7; herring gull, 2; ring-billed gull, 200 (est.); mourning dove, 152; screech owl, 1; barred owl, 2; belted kingfisher, 7; yellow-shafted flicker, 36; pileated woodpecker, 2; red-bellied woodpecker, 41; red-headed woodpecker, 1; yellow-bellied sapsucker, 8; hairy woodpecker, 3; downy woodpecker, 14; eastern phoebe, 8; blue jay, 59; Am. crow, 146; Carolina chickadee, 44; tufted titmouse, 24; brown creeper, 3; winter wren, 11; Bewick's wren, 1; Carolina wren, 38; mockingbird, 22; catbird, 1 (A. S., L. C., Barbigs); brown thrasher, 6; robin, 8; hermit thrush, 13; eastern bluebird, 12; golden-crowned kinglet, 40; ruby-crowned kinglet, 25; Am. pipit, 51; cedar waxwing, 127; loggerhead shrike, 36; starling, 289; orange-crowned warbler, 3 (1 each by 3 separate parties) myrtle warbler, 105; English sparrow, 236; eastern meadowlark, 156; red-wing, 5; bronzed grackle, 21; cowbird, 17; cardinal, 113; purple finch, 1; Am. goldfinch, 27; eastern towhee, 16; Savannah sparrow, 104; slate-colored junco, 66; tree sparrow, 1 (H. B.); field sparrow, 41; white-crowned sparrow, 16; white-throated sparrow, 391; fox sparrow, 62;

swamp sparrow, 57; song sparrow, 94; Lapland longspur, 2. **Total,** 78 species; approximately 8350 individuals. — Mr. and Mrs. Ben B. Coffey, Jr., Mr. and Mrs. Howard Barbig, Newton Hanson, Jim McWhorter, Patricia Moore, James L. Norman, Ruel Patterson, Alice Smith, Demett Smith, Jr. (Memphis Chapter, Tennessee Ornithological Society).

201. Tupelo, Miss. (same as 1946; open farmlands along Highway 78, west and east, and Highway 6 enroute to park, and Legion Lake; lake 30%, town with U.S. Fish Hatchery, Gum Pond, and weedy fields nearby, 30%, deciduous woods and lake of Tombigbee State Park 30%; mixed pines and hardwoods, 10%). — Dec. 24; 7:30 a.m. to 5 p.m. Generally overcast; temp. 32° to 36°; wind N, 8 m.p.h. Observers together. Total miles, 27 (25 by car, 2 on foot). Pied-billed grebe, 12; great blue heron, 2; mallard, 28; green-winged teal, 2; ring-necked duck, 101; canvas-back, 27; lesser scaup duck, 11; ruddy duck, 3; turkey vulture, 19; black vulture, 96; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 3; red-shouldered hawk, 2; marsh hawk, 2; sparrow hawk, 3; bob-white, 1; Am. coot, 2; killdeer, 33; Wilson's snipe, 16; least sandpiper, 2 (15 feet, 7x50 glasses, good light); mourning dove, 88; barn owl, 1; horned owl, 1 (freshly dead); belted kingfisher, 2; red-bellied woodpecker, 5; yellow-bellied sapsucker, 2; downy woodpecker, 4; eastern phoebe, 4; blue jay, 31; Am. crow, 34; Carolina chickadee, 8; tufted titmouse, 5; brown creeper, 9; Carolina wren, 9; short-billed marsh wren, 1 (5 feet, well observed); mockingbird, 15; hermit thrush, 2; eastern bluebird, 23; golden-crowned kinglet, 13; ruby-crowned kinglet, 2; Am. pipit, 6; loggerhead shrike, 5; starling, 352; myrtle warbler, 3; pine warbler, 3; English sparrow, 58; eastern meadowlark, 147; red-wing, 20; unidentified small blackbirds, 370; bronzed grackle, 78; cowbird, 80; cardinal, 33; goldfinch, 39; eastern towhee, 6; Savannah sparrow, 30; slate-colored junco, 66; field sparrow, 97; white-crowned sparrow, 1; white-throated sparrow, 72; fox sparrow, 6; swamp sparrow, 25; song sparrow, 62. **Total,** 62 species; 2185 individuals. — Ben B. Coffey, Jr., Newton Hanson, Ruel Patterson, Demett Smith (1st Memphis 'Cranetown" Rovers).

202. Ann Arbor, Mich. (Huron River valley and adjoining areas from 6 miles northwest of town to 6 miles southeast of town, and north to Whitmore and Mud Lakes; bottomland and river 30%, deciduous woodlots 20%, coniferous plantations 9%, cultivated fields 18%, abandoned fields 7%, orchard 3%, tamarack-poison sumac swamp 13%). — Dec. 20; 7:30 a.m. to 5:20 p.m. Light fog in a.m. to clear; temp. 12° to 25°; wind NW, 0-5 m.p.h.; 4-in. snow covering ground; lakes frozen, river 80% frozen. Eight observers in 2 parties. Total hours, 16 (15 on foot, 1 in car); total miles, 45 (20 on foot, 25 in car). Mallard, 114 (est.); black duck, 291 (est.); canvas-back, 1; Am. golden-eye, 15; hooded merganser, 1; red-tailed hawk, 5; sharp-shinned hawk, 1; ruffed grouse, 1; ring-necked pheasant, 7; mourning dove, 79; horned owl, 1; belted kingfisher, 3; yellow-shafted flicker, 2; red-bellied woodpecker, 1; hairy woodpecker, 4; downy woodpecker, 12; horned lark, 20; blue jay, 50; Am. crow, 2; black-capped chickadee, 56; tufted titmouse, 27; white-breasted nuthatch, 24; red-breasted nuthatch, 4; brown creeper, 2; Carolina wren, 1; robin, 1; hermit thrush, 2; golden-crowned kinglet, 2; ruby-crowned kinglet, 1; starling, 43; myrtle warbler, 2; English sparrow, 593; cardinal, 41; purple finch, 22; pine siskin, 1; Am. goldfinch, 46; slate-colored junco, 169; tree sparrow, 72; song sparrow, 10. **Total,** 39 species; about 1729 individuals. — Charles C. Carpenter, Theodore Elferdink, Jr., John L. George, P. B. Hofslund, James Jordan, Malcolm McDonald, Jeanne Moore, Robert L. Patterson.

203. Battle Creek, Mich. (Irving Park, Kalamazoo River west of city to Gull Lake and return, 3 feeding stations; in parts of Calhoun and Kalamazoo counties; open farmland 15%, wooded river and stream banks 40%, shrubby fence growths and highway borders 25%, lake front 15%, feeding stations 5%). — Dec. 28; 8 a.m. to 5 p.m. Cloudy, clearing for a few minutes about noon then overcast during p.m.; temp. 23° to 27°; wind NW, 20 m.p.h.; 3-in. snow on ground; small lakes frozen, Gull Lake almost entirely open, rivers open. Ten observers in 4 parties. Total miles, 91 miles (85 by car, 6 on foot); total hours, approximately 57. Great blue heron, 1; Canada goose, 2500 (same estimate by two parties); snow goose, 1; mallard and black duck, 1000 (est.); canvas-back, 6; greater scaup duck, 14 (observed at fairly close range — N.T.P.); Am. golden-eye, 181; hooded merganser, 6; Am. merganser, 8; ring-necked pheasant, 1; herring gull, 8; mourning dove, 2; barred (?) owl, 1; yellow-shafted flicker, 3; hairy woodpecker, 4; downy woodpecker, 21; blue jay, 24; black-capped chickadee, 57; tufted titmouse, 15; white-breasted nuthatch, 10; brown creeper, 3; mockingbird, 1 (has been at W.K. Kellogg Bird Sanctuary since late in Nov.); robin, 2; eastern bluebird, 5; cedar waxwing, 92; starling, 52; English sparrow, 337; cardinal, 40; purple finch, 19; Am. goldfinch, 188; slate-colored junco, 53; tree sparrow, 111; song sparrow, 4. **Total,** 34 species; 4770 individuals. (Brown thrasher caught in trap, Dec. 26.) — Edward M. Brigham, Jr., Edward M. Brigham, 3rd, Mrs. L. C. Nielsen, N. Theodore Peterson, Miles D. Pirnie, Mrs. Harry J. Theis, Mrs. Clarence Walker, Mr. and Mrs. Halbert B. Wood, Lawrence H. Walkinshaw.

204. Detroit, Mich. (centering at 14 Mile and Lahser Roads, extending to Pontiac on the north, 6 Mile Road to the south, Big Beaver to the east, and Halsted Road to the west; same area covered on the last two counts, but with better coverage this year because of more groups in the field; open farm and grassland 40%, swamps, lake shores and

stream banks 20%, conifer groves 5%, mature deciduous woodlands 10%, second growth deciduous woodlands 10%, towns and suburbs 15%). — Dec. 21; 8 a.m. to 5 p.m. Cloudy in a.m., bright most of p.m.; temp. 33° to 36°.; wind NNW, 12-5 m.p.h.; ground covered with 5-in. snow; most lakes frozen; streams open. Thirty-eight observers in 9 parties. Total hours, 67½ (50½ on foot, 17 by car); total miles, 228 (59 on foot, 169 by car). Mallard, 491 (est.); black duck, 336 (est.); wood duck, 5; Cooper's hawk, 1; red-tailed hawk, 2; sparrow hawk, 10; bob-white, 49; ring-necked pheasant, 94; ring-billed gull, 1; mourning dove, 123; long-eared owl, 1; belted kingfisher, 1; yellow-shafted flicker, 4; hairy woodpecker, 2; downy woodpecker, 30; horned lark, 13; blue jay, 84; Am. crow, 19; black-capped chickadee, 66; tufted titmouse, 16; white-breasted nuthatch, 25; red-breasted nuthatch, 2; brown creeper, 9; robin, 3; golden-crowned kinglet, 19; cedar waxwing, 36; starling, 60; mytrle warbler, 1; English sparrow, 837 (est.); cardinal, 116; purple finch, 5; Am. goldfinch, 60; slate-colored junco, 275; tree sparrow, 357 (est.); song sparrow, 8. **Total,** 35 species; approximately 3161 individuals. — Virginia Olmsted, Louise Lockeman, Orelia Kelly, Genevieve Williams, Robin Hicks, Evelyn Kelly, George A. Kelly, Mabel Ladd, Malcolm Drife, Mary Totten, Raymond Bachelor, Eli Nielsen, Katherine Spence, Bob Hutchenson, Don Schroeder, Bob Strain, Frank Reynolds, Rima Nickell, Anne Vanderheide, Doris Sibley, Mr. Morris, Jay Johnson, Mary Hall, Grace Flood, Keith Kreag, Cecil Billington, Jim Clark, Bill Tauck, Homer Roberts; Leaders, Jack Eichstedt, Ralph O'Reilly, Jr., Morris Trittipo, Tom Hadley, Bob Burns, Douglas White, Millie Reynolds, Hessel Tenhave; general chairman, Walter P. Nickell (Detroit Audubon Society).

205. East Lansing, Mich. (Michigan State College campus, north to Park Lake vicinity and return; city 10%, open farmland 10%, deciduous woodlots 40%, swamp timber 20%, brushy marsh and lake border 20%). — Dec. 23; 8 a.m. to 4:30 p.m. Mostly cloudy in a.m. becoming fair by mid-afternoon; temp. 24° to 26°; wind NW, 3-6 m.p.h. 1-4 inches of snow on ground; lakes entirely frozen over. Observers together. Total hours, 8½; total miles, 33 (25 by auto, 8 on foot). Ring-necked pheasant, 13; belted kingfisher, 1; yellow-shafted flicker, 4; yellow-bellied sapsucker, 1; downy woodpecker, 3; blue jay, 14; Am. crow, 150 (est.); black-capped chickadee, 14; tufted titmouse, 8; white-breasted nuthatch, 4; brown creeper, 3; starling, 10; English sparrow, 218; cardinal, 19; Am. goldfinch, 1; slate-colored junco, 25; tree sparrow, 31; song sparrow, 20. **Total,** 18 species; 539 individuals. — George J. Wallace, Newell A. McCune, L. Claire Hulbert.

206. Muskegon, Mich. (business section to north shore of Muskegon Lake to Dunes State Park, south side of lake to Lake Michigan channel; business and residential section 50%, wooded dunes and lake shore, 50%) — Dec. 21; 9 a.m. to 6 p.m. Clear, bright sunshine after 11 a.m.; no precipitation; temp. 35°; wind W, 4 m.p.h. Total hours, 9; total miles, 20 (by cars and on foot). Common loon, 2; mallard, 4; black duck, 142; scaup duck, 10,000 (est — H. H. S.); Am. golden-eye, 1041; old-squaw, 3; Am. merganser, 54; bald eagle, 4 (2 immature); ruffed grouse, 2; Am. coot, 1; herring gull, 1287 (two flocks, 537 and 750); horned owl, 1; red-headed woodpecker, 3; downy woodpecker, 2; blue jay, 8; Am. crow, 2; black-capped chickadee, 11; white-breasted nuthatch, 3; brown creeper, 1; robin, 1; golden-crowned kinglet, 15; starling, 39; English sparrow, 67; cardinal, 2; Am. goldfinch, 12; slate-colored junco, 8; tree sparrow, 12. **Total,** 27 species; 12,727 individuals (Scaups were in great rafts on Muskegon Lake.) — A. Verne Fuller, Almeda Boulton, Lillian Abel, George Wickstrom, Cecil Kersting, Don Sewell, Fred Wilder, Philip Glotfelty, III, James Nutt, Paul A. and Margaret Drake Elliott (Muskegon Bird Club).

207. Vanderbilt (Otsego Co.), Mich. (Lake Louise and Pigeon River area; open farmland 10%, town suburbs 1%, deciduous farm woodlots 20%, jackpine 30%, cedar, spruce bogs 30%, white pine 9%). — Dec. 26; 10 a.m. to 4 p.m. Cloudy; temp. 18° to 22° F.; wind N to W, 10 m.p.h.; ground covered with 10-12 in. soft snow; lakes frozen, streams open. Observers together. Total hours, 6; total miles, 3 (on foot). Black duck, 1; downy woodpecker, 1; blue jay, 5; black-capped chickadee, 34; red-breasted nuthatch, 4; winter wren, 1; northern shrike, 1; starling, 8; English sparrow, 20; purple finch, 18; pine siskin, 24; Am. goldfinch, 85; snow bunting, 30. **Total,** 13 species; 232 individuals. — Eugene Kenaga, Joan Kenaga.

208. Bedford, Ind. (same area as previous years; deciduous woodlands 65%, abandoned fields and pastures 25%, mixed pines and hardwoods 5%, yards and gardens 5%). — Dec. 28; 7 a.m. to 5 p.m. Overcast; temp. 54° all day; wind SW, 25 m.p.h.; ground bare. Two observers together part of the time. Total hours, 15; total miles, 20 (on foot). Bob-white, 3; red-bellied woodpecker, 3; hairy woodpecker, 1; downy woodpecker, 5; blue jay, 12; Am. crow, 15; black-capped chickadee, 29; tufted titmouse, 7; winter wren, 2; Carolina wren, 9; brown thrasher, 1 (within 6 feet of this bird); robin, 1; eastern bluebird, 9; starling, 73; English sparrow, 140; cardinal, 49; Am. goldfinch, 30; eastern towhee, 7; Savannah sparrow, 3 [no details — Ed.]; junco, 114; tree sparrow, 27; song sparrow, 15. **Total,** 22 species; 555 individuals. — Max Hyder, Carleton Thoroman.

209. Indianapolis, Ind. (White River from Maywood to Holliday Park, including sewage disposal plant, Lake Sullivan, fish hatcheries, and Butler

University campus; Fall Creek to Geist Reservoir; Pleasant Run; Bacon's Swamp; open farmland 10%, deciduous woods 35%, swamp 5%, stream and river bank 35%, gravel pit 5%, lake 10%). — Dec. 20; dawn to dusk. Clear; little wind; temp. 25° to 42°, 3-in. snow on ground, river and streams not frozen, lakes frozen except for areas kept open by waterfowl. Twenty-two observers in 13 parties. Total hours, 43; total miles, 28. Great blue heron, 4; Canada goose, 80; mallard, 835; black duck, 551; gadwall, 11; baldpate, 11; wood duck, 3; Am. golden-eye, 3 ♂; buffle-head, 2 ♀; hooded merganser, 1 ♂; Am. merganser, 8; Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 2; marsh hawk, 3; sparrow hawk, 3; bob-white, 26; ring-necked pheasant, 4; Am. coot, 1; ring-billed gull, 3; mourning dove, 57; barred owl, 1; belted kingfisher, 3; yellow-shafted flicker, 33; red-bellied woodpecker, 8; yellow-bellied sapsucker, 1; hairy woodpecker, 5; downy woodpecker, 60; horned lark, 35; blue jay, 62; Am. crow, 263; black-capped chickadee, 38; tufted titmouse, 25; white-breasted nuthatch, 8; red-breasted nuthatch, 1; brown creeper, 12; winter wren, 3; Carolina wren, 13; mockingbird, 3; robin, 5; eastern bluebird, 3; golden-crowned kinglet, 19; ruby-crowned kinglet, 7 (1 singing — H. W., C. M.); starling, 654; myrtle warbler, 8; palm warbler, 3 (identified by white marks on tail, yellowish underparts, tail wagging — Wm. B., C. K., H. W., C. M.); English sparrow, 449; eastern meadowlark, 3; bronzed grackle, 2; cardinal, 177; purple finch, 1; Am goldfinch, 43; eastern towhee, 13; slate-colored junco, 742; tree sparrow, 220; white-crowned sparrow, 3; white-throated sparrow, 2; song sparrow, 96; Lapland longspur, 5. **Total,** 59 species; about 4640 individuals. The small number of starlings compared to previous years is due to the fact that the center of the city was not covered. (Seen Dec. 24: green-winged teal, 1.) — Mrs. John L. Goldthwaite, Dale Rice, Charles Berriman, Howard Wright, Charles Marks, William Barnes, Charles Keller, Mildred Campbell, Dorothy White, Mr. and Mrs. Joel Hadley, Mr. and Mrs. Otto Mengering, Mark Pangborn, Mrs. Harry Bell, G. D. Klopp, Frank Dailey, Joe Guarnery, Mrs. Harry Coburn, Robert Black, Robert Pedigo, Ed Mockford (Amos Butler Chapter, Indiana Audubon Society).

210. Lafayette, Ind. (15-mile diameter circle, center at top of hill of route 52 bypass; Wabash River from mouth of Tippecanoe River to Granville Bridge, Wildcat, Wea, Jordan, and Indian Creeks, Cary Scout Camp, Hadley's Lake, Whitsell's Pond, Soldiers' Home, Happy Hollow, McCormick's Woods, Horticultural Farm, Purdue campus, Springvale Cemetery, fields SW, NW and E of town; river bottom 20%, creek bottom 37%, mature deciduous woods 7%, low woods and brush 14%, evergreen woods 1%, open farm land 5%, open fields 8%, fence rows 6%, town 2%). — Dec. 22; 6 a.m. to 4:10 p.m. Misty and cloudy; temp. 24° to 35°; barometer 29.95 to 29.83; wind SSE 5-2 m.p.h.; ground partly covered with snow; ponds and lake frozen, river and creeks open. Twenty observers in 8 parties. Total hours, 49 (47 on foot, 2 by car); total miles, 101 (61 on foot, 40 by car). Great blue heron, 1; mallard, 10; black duck, 16; green-winged teal, 1 (C. M. K.); wood duck, 1 (♂ seen at 30 yds. with 20X scope — R. M.); ring-necked duck, 1; Am. golden-eye, 23; Am. merganser, 6; Cooper's hawk, 2; red-tailed hawk, 10; bald eagle, 1 (ad. — C. M. K.); marsh hawk, 7; sparrow hawk, 3; hawk (sp.), 7; bob-white, 26; ring-necked pheasant, 4; Wilson's snipe, 1 (all points noted at close range — I. W. B.); mourning dove, 83; barn owl, 1; screech owl, 1; horned owl, 3; long-eared owl, 2; belted kingfisher, 9; yellow-shafted flicker, 39; red-bellied woodpecker, 20; yellow-bellied sapsucker, 2; hairy woodpecker, 15; downy woodpecker, 133; horned lark, 5; blue jay, 69; Am. crow, 379; black-capped chickadee, 38; tufted titmouse, 122; white-breasted nuthatch, 12; brown creeper, 47; winter wren, 5; Carolina wren, 14; robin, 21; eastern bluebird, 5; golden-crowned kinglet, 42; ruby-crowned kinglet, 1 (seen at very close range — R. M.); starling, 290; English sparrow, 504; eastern meadowlark, 24; rusty blackbird, 3 (close range with 8X glasses — H. M.); cardinal, 119; Am. goldfinch, 15; eastern towhee, 1; slate-colored junco, 724; tree sparrow, 569; field sparrow, 18 (by several observers); swamp sparrow, 3 (I. W. B.); song sparrow, 175. **Total,** 52 species; 3633 individuals. (Seen in area Dec. 23: Canada goose, 45; bronzed grackle, 1.) — Irving W. Burr, Terry Burr, Gordon Richard Graves, Bruce Graves, John Hall, Frank Haller, Ross Horrall, William T. Johnston, Charles M. Kirkpatrick, Richard Kizer, Merle Kuns, Howard Michaud, Ted Michaud, Russell Mumford, Ernest Provost, Donald Pryor, J. L. VanCamp, Merritt Webster, Roy Whistler.

211. Richmond, Ind. (Conservation Park, Robinson's woods, to Centerville and 6 miles west, Clear Creek to Whitewater River and up the Whitewater to Richmond; deciduous woodlands 55%, residential 5%, marsh 6%, agricultural fields 5%, abandoned fields 20%, bottomland 9%). — Dec. 21; 8 a.m. to 4:30 p.m. Heavily overcast until 3 p.m., sun broke through for ½ hour; temp. 29° to 34°; wind NW, 3-5 m.p.h.; ground partly covered with snow; lakes frozen; streams clear. Twelve observers in 4 parties. Total hours, 24; total miles, 30 (on foot). Great blue heron, 1; mallard, 53; wood duck, 2; Cooper's hawk, 2; red-shouldered hawk, 1; marsh hawk, 1; sparrow hawk, 1 bob-white, 35; killdeer, 1; mourning dove, 7; horned owl, 2; belted kingfisher, 6; yellow-shafted flicker, 15; red-bellied woodpecker, 16; yellow-bellied sapsucker, 1; hairy woodpecker, 9; downy woodpecker, 61; blue jay, 36; Am. crow, 645; Carolina chickadee, 133; tufted titmouse, 95; white-breasted nuthatch, 26; brown creeper, 19; winter wren, 3; Carolina wren, 17; mockingbird, 1; robin, 1; eastern bluebird, 4; golden-crowned

kinglet, 3; starling, 345; English sparrow, 77; bronzed grackle, 1; cardinal, 79; pine siskin, 1; Am. goldfinch, 25; eastern towhee, 14; slate-colored junco, 253; tree sparrow, 272; field sparrow, 15; white-crowned sparrow, 1 (9 banded by the end of January — J. B. C.); swamp sparrow, 60; song sparrow, 99. **Total,** 42 species; 2439 individuals. — James B. Cope, Millard Markle, David Telfair, Mrs. Don McKinney, Mrs. Byerly Ward, Mr. Byerly Ward, Bonnie McMains, Mr. Orcutt, Charles McGraw, Mrs. C. S. Snow, Jean Snow, Ralston Snow (Richmond Audubon and Nature Club).

212. South Bend, Ind. (same area as 1946 count; deciduous woods 40%, marshland 20%, open farmland 25%, open river 10%, cedar and spruce groves 5%). — Dec. 28; dawn to dusk. Cloudy, with good visibility; temp. 29° to 34° F.; wind NW, 2-8 m.p.h.; 2-in. snow on ground; creeks and river open, lakes frozen. Thirteen observers in 4 parties. Total hours 38 (on foot); total miles, 45 (on foot). Mallard, 89; lesser scaup duck, 3; Am. golden-eye, 96; Am. merganser, 1; Cooper's hawk, 1; Am. rough-legged hawk, 2; sparrow hawk, 1; ring-necked pheasant, 4; herring gull, 411; mourning dove, 14; barred owl, 1; yellow-shafted flicker, 2; red-bellied woodpecker, 1; red-headed woodpecker, 1; hairy woodpecker, 5; downy woodpecker, 22; horned lark, 8; blue jay, 41; Am. crow, 140; black-capped chickadee, 10; tufted titmouse, 33; white-breasted nuthatch, 14; winter wren, 3; robin, 12; golden-crowned kinglet, 36; cedar waxwing, 20; starling, 134; English sparrow, 479; cardinal, 42; purple finch, 1; common redpoll, 33; Am. goldfinch, 20; eastern towhee, 7; slate-colored junco, 202; tree sparrow, 104; song sparrow, 31. **Total,** 36 species; about 2024 individuals. — U. F. Coleman, Leroy Pierce, Charles Metzger, Estelle Cover, Duane Blume, M. D. Harbaugh, Roy Rogers, Elmer Rodgers, Vern Doan, Wm. F. Rodgers, H. L. Woolverton, M. C. Farrar, C. K. Barnes (South Bend Audubon Society).

213. Bird Haven Sanctuary (Richland Co.), Ill. (farmlands to the north 20%, Fox River bottomlands to the west and south 10%, parks and streets of Olney 10%, deciduous forests of the sanctuary 60%). — Dec. 22; 8 a.m. to 4 p.m. Partly cloudy; moderate wind; temp. below freezing at beginning with a high of 41°; patches of snow; some open water. Observers together. Total hours, 8; total miles, 10 (on foot). Red-shouldered hawk, 4; marsh hawk, 4; sparrow hawk, 4; bob-white, 2; mourning dove, 33; barred owl, 2; flicker, 8; red-bellied woodpecker, 7; red-headed woodpecker, 1; hairy woodpecker, 2; downy woodpecker, 8; blue jay, 21; Am. crow, 40; black-capped chickadee, 20; tufted titmouse, 13; white-breasted nuthatch, 4; brown creeper, 1; Carolina wren, 9; mockingbird, 1; eastern bluebird, 5; starling, 147; English sparrow, 80; cardinal, 23; purple finch, 6; Am. goldfinch, 8; slate-colored junco, 109; tree sparrow, 119; song sparrow, 2. **Total,** 28 species; 683 individuals. — Mrs. Chester Scherer, Vera Scherer, Mary M. Diel, Perna M. Stine.

214. Brussels, Ill. (15-mile circle centered at Brussels, and including Pere Marquette State Park and Calhoun County Wildlife Refuge; Mississippi and Illinois River lowlands 75%, upland orchards and deciduous woods 25%). — Dec. 28; 7:30 a.m. to 5:30 p.m. Clear, sun warm and bright; temp. 30° to 45°; wind E to W, 1-7 m.p.h.; ground bare, freeze to light thaw. Thirteen observers in 3 parties. Total hours, 30; total miles, 96 (91 by car, 5 on foot). Double-crested cormorant, 3; mallard, 200-000 (estimate by U. S. game management agent Davis); black duck, 11; canvas-back, 250; lesser scaup duck, 15; Am. golden-eye, 7; Am. merganser, 3; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 10; red-shouldered hawk, 2; bald eagle, 27; marsh hawk, 4; sparrow hawk, 18; bob-white, 30; Wilson's snipe, 1; herring gull, 32; ring-billed gull, 320; mourning dove, 27; belted kingfisher, 3; yellow-shafted flicker, 78; pileated woodpecker, 4; red-bellied woodpecker, 41; red-headed woodpecker, 145; yellow-bellied sapsucker, 2; downy woodpecker, 69; blue jay, 97; Am. crow, 325; black-capped chickadee, 154; tufted titmouse, 45; white-breasted nuthatch, 18; brown creeper, 6; Carolina wren, 20; mockingbird, 2; brown thrasher, 1; robin, 19; eastern bluebird, 38; golden-crowned kinglet, 5; cedar waxwing, 11; loggerhead shrike, 5; starling, 550; English sparrow, 1000 (est.); eastern meadowlark, 3; red-wing, 1000; rusty blackbird, 20; cowbird, 2; cardinal, 283; purple finch, 6; Am. goldfinch, 208; slate-colored junco, 325; tree sparrow, 550; field sparrow, 1; white-throated sparrow, 12; swamp sparrow, 5; song sparrow, 15. **Total,** 55 species; 205,830 individuals. — M. A. Berry, Jack Buese, Athene Dale, Bob Dale, David Dale, Jack Decker, Corida Hanna, Cora W. Hutchinson, O. C. K. Hutchinson, Rev. George M. Link, Alice Waterbury, Beatrice J. Waterbury, Neil M. Waterbury.

215. Champaign-Urbana, Ill. (Sangamon River floodplain near White Heath, Brownfield and Trelease Woods, Busey Pasture, intermediate farmland; forest 70%, shrubby fields and forest-edge 20%, open country 10%). — Dec. 27; 8 a.m. to 4 p.m. Clear; light to medium wind; temp. 25° to 40°; light snow covering only in woods. Eight observers in 2 parties. Total party-hours, 9 (on foot); total party-miles, 10 (on foot); 32 miles roadside observations. Red-tailed hawk, 4; marsh hawk, 1; sparrow hawk, 3; bob-white, 24 (3 coveys); barred owl, 1; flicker, 25; red-bellied woodpecker, 16; red-headed woodpecker, 1; hairy woodpecker, 8; downy woodpecker, 19; horned lark, 2; blue jay, 31; Am. crow, 68; black-capped chickadee, 31; tufted titmouse, 41; white-breasted nuthatch, 14; brown creeper, 10; Carolina wren, 3; robin, 2; eastern bluebird, 2; golden-crowned kinglet, 4; starling, 111; English sparrow, 71; cardinal, 22; purple finch,

11; Am. goldfinch, 10; slate-colored junco, 69; tree sparrow, 23; white-throated sparrow, 1 (S. C. K.); song sparrow, 8. **Total,** 30 species; 636 individuals. — Mrs. J. H. Beaumont, Janice Beaumont, Don V. Duncan, Steven Emerson, S. C. Kendeigh, Lowell S. Miller, George A. Willis, Ralph E. Yeatter.

216. Chicago, Ill. (same area as in 1946 with the addition of Belmont Harbor and the lake front connecting it with Montrose Harbor, and a feeding station; wooded golf course 12%, deciduous woodland 34%, feeding station 10%, open fields 5%, lake front and harbors 39%). — Dec. 27; 8 a.m. to 12:15 p.m., 2 to 4:45 p.m. Clear; temp. 24° to 40°; wind NW, 1-7 m.p.h.; most of the ground was covered with light snow; lake front open, harbors ⅓ open. Total hours, 7 (on foot); total miles, 6¼ (on foot). Mallard, 136; black duck, 3; Am. golden-eye, 175; old-squaw, 42; Am. merganser, 227; red-breasted merganser, 21; red-shouldered hawk, 1; herring gull, 332; ring-billed gull, 5; Bonaparte's gull, 10; hairy woodpecker, 2; downy woodpecker, 8; blue jay, 1; Am. crow, 25; black-capped chickadee, 9; tufted titmouse, 1; white-breasted nuthatch, 6; brown creeper, 2; starling, 5; English sparrow, 26; cardinal, 1; slate-colored junco, 10. **Total,** 22 species; approximately 1048 individuals. — Joseph F. Healy.

217. East St. Louis, Ill. (Lake Park and along shores of Horseshoe Lake, and in the surrounding fields and thickets; open lake shore 75%, willow thickets 10%, open fields, including nursery, 15%). — Dec. 22; 8 a.m. to 3 p.m. Cloudy; temp. 28° to 36°; wind W to NW, 8 m.p.h.; ground bare and frozen; water area 60% frozen. Total hours, 7 (6 on foot); total miles, 9 (on foot). Great blue heron, 1; mallard, 475; black duck, 28; gadwall, 1 (has wintered on lake); green-winged teal, 31; redhead, 4; canvas-back, 6; lesser scaup duck, 246; Am. golden-eye, 29; white-winged scoter, 1 (has been observed on lake by many persons in past 3 weekends); sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 1; marsh hawk, 3; sparrow hawk, 5; bob-white, 9; Am. coot, 287; herring gull, 54; ring-billed gull, 6; belted kingfisher, 2; yellow-shafted flicker, 5; downy woodpecker, 7; hairy woodpecker, 2; yellow-bellied sapsucker, 1; red-bellied woodpecker, 6; red-headed woodpecker, 3; blue jay, 29; Am. crow, 57; Carolina chickadee, 8; tufted titmouse, 8; white-breasted nuthatch, 4; brown creeper, 1; mockingbird, 2; robin, 7; eastern bluebird, 3; loggerhead shrike, 2; European tree sparrow, 31; English sparrow, 8; meadowlark [sp.], 4; red-wing, 68; bronzed grackle, 5; cardinal, 26; purple finch, 5; Am. goldfinch, 24; eastern towhee, 2; slate-colored junco, 79; tree sparrow, 243; field sparrow, 7; white-crowned sparrow, 84 (white-crowns, fox, white-throats and swamps, not considered usual wintering sparrows in the St. Louis Area, winter in large numbers in the marshy grasses near Lake Park each year; white-crowns are usually 90 to 95% immature); white-throated sparrow, 31; fox sparrow, 24; swamp sparrow, 72; song sparrow, 40. **Total,** 54 species; 2091 individuals. — James Earl Comfort.

218. Elsah, Ill. (vicinity of Principia College; same area as in 1938 and subsequent counts; deciduous forest 25%, open farmland 30%, marsh 15%, river area 20%, village 5%, campus 5%). — Dec. 20; 6:40 a.m. to 3:15 p.m. Clear, with slight haze increasing throughout day; temp. 27° to 52°; wind SE, 1-7 m.p.h.; ground bare; water open. Six observers in 2 parties. Total hours, 8 (7 on foot, 1 in rowboat); total miles, 13 (12 by foot, 1 in boat). Canada goose, 14; mallard, 41; Am. golden-eye, 2; red-tailed hawk, 2; sparrow hawk, 1; herring gull, 25; horned owl, 3; belted kingfisher, 5; yellow-shafted flicker, 21; red-bellied woodpecker, 8; hairy woodpecker, 1; downy woodpecker, 10; blue jay, 13; Am. crow, 600; black-capped chickadee, 26; tufted titmouse, 25; white-breasted nuthatch, 4; brown creeper, 1; Carolina wren, 10; mockingbird, 1; robin, 12; hermit thrush, 1 (seen at 50 feet, with 7X binoculars — R. W. W.); eastern bluebird, 22; cedar waxwing, 1; starling, 1500; English sparrow, 75; cardinal, 32; purple finch, 2; Am. goldfinch, 21; slate-colored junco, 173; tree sparrow, 21; white-throated sparrow, 5; song sparrow, 28. **Total,** 33 species, about 2706 individuals. — G. B. Happ, J. F. Wanamaker, R. R. Wason, G. M. Happ, J. Matravers, D. Archer.

219. Lisle (Dupage Co.), Ill. (800 acres within the Morton Arboretum). — Dec. 28; 9 a.m. to 3:30 p.m. Clear; wind, W.; temperature 33°; ground mostly bare of snow. Thirty-six observers mostly together using 11 autos. Total miles, 16 (10 by auto, 6 on foot). Red-tailed hawk, 1; sparrow hawk, 1; long-eared owl, 3; short-eared owl, 1; downy woodpecker, 2; blue jay, 3; Am. crow, 18; black-capped chickadee, 6; tufted titmouse, 1; white-breasted nuthatch, 1; red-breasted nuthatch, 2; brown creeper, 1; golden-crowned kinglet, 10; cedar waxwing, 25; cardinal, 14; purple finch, 2; Am. goldfinch, 7; slate-colored junco, 100; tree sparrow, 4; song sparrow, 1. **Total,** 20 species; 203 individuals. — members and friends of Chicago Ornithological Society and M. V. Nature Club [field chairman, Karl E. Bartel, did not give names of participants — Ed.].

220. Michael (Calhoun Co.), Ill. (15-mile circle centered at Michael and including Trail Rangers area; river lowlands 80%, orchards 10%, deciduous woods 10%). — Dec. 28; 4:30 a.m. to 6 p.m. Clear, bright sun; temp. 26° to 45°; wind S, 5 m.p.h.; ground bare, frost early. Twenty-two observers in 6 parties. Total hours, 54; total miles, 95 (85 by car, 10 on foot). Double-crested cormorant, 25; mallard, 3000 (est.); black duck, 22; blue-winged teal, 2; Am. golden-eye, 19; white-winged scoter (?), 2; Am. merganser, 6; sharp-shinned hawk,

2; Cooper's hawk, 2; red-tailed hawk, 14 (1 black phase, with no red or white in tail, observed with 8X Zeiss binoculars — G. M. L.) [black phase suggests western red-tailed hawk — Ed.]; red-shouldered hawk, 4; bald eagle, 3; marsh hawk, 3; sparrow hawk, 14; bob-white, 2; killdeer, 1; Wilson's snipe, 5; herring gull, 2; ring-billed gull, 42; mourning dove, 32; screech owl, 6; horned owl, 6; long-eared owl, 1; belted kingfisher, 2; yellow-shafted flicker, 29; pileated woodpecker, 2; red-bellied woodpecker, 47; red-headed woodpecker, 8; yellow-bellied sapsucker, 4; hairy woodpecker, 22; downy woodpecker, 88; horned lark, 13; blue jay, 126; Am. crow, 49; black-capped chickadee, 74; tufted titmouse, 95; white-breasted nuthatch, 29; brown creeper, 4; winter wren, 4; Carolina wren, 31; long-billed marsh wren, 1 (observed with 8X Zeiss binoculars — G. M. L.); mockingbird, 1; robin, 103; eastern bluebird, 110; golden-crowned kinglet, 5; cedar waxwing, 48; loggerhead shrike, 1; starling, 168; English sparrow, 522; red-wing, 15; rusty blackbird, 9; grackle, 4; cardinal, 182; purple finch, 4; goldfinch, 36; slate-colored junco, 720; tree sparrow, 90; white-throated sparrow, 6; song sparrow, 11. **Total,** 60 species; 5878 individuals. (5000 robins seen, Dec. 26 — G. M. L.) — William Bremser, Jr., Robert J. Broden, Kenneth Cope, Beatrice Hopwood, Lois Hopwood, Al Kaszynski, Cel Kaszynski, Cecil Kersting, Paul Cecil King, Donald R. Knight, Gilbert L. Knight, Rev. George M. Link, Jim Meno, Bill Robertson, Anthony Schmidt, Carl Schmidt, Larry Schmidt, Marie Stelbrink, Melvin Thompson, Eugene Wilhelm, Robert Wilhelm, Jim Ziervogel.

221. Moline, Ill. (along Rock River shore below Davis power plant, around the island to Black Hawk State Park, through woodland over park trails and return; mature deciduous woodlands 50%, cattail marsh 5%, pastureland 15%, river shore 30%). — Dec. 22. Overcast, fog lifting in p.m.; temp. 26° to 35°; wind N, 1-7 m.p.h.; ground frozen, covered with snow in sheltered spots; all water except parts of Rock River frozen over. Six observers together. Total hours, 8 (on foot); total miles, 6½ (on foot). Hawk (sp.), 1; bald eagle, 1 (imm.); bob-white, 15; herring gull, 4; barred owl, 2; belted kingfisher, 2; downy woodpecker, 5; blue jay, 7; Am. crow, 4; black-capped chickadee, 16; tufted titmouse, 2; white-breasted nuthatch, 8; robin, 1; golden-crowned kinglet, 2; ruby-crowned kinglet, 1; Bohemian waxwing, 19; English sparrow, 3; cardinal, 1; slate-colored junco, 4; fox sparrow, 10. **Total,** 20 species; 108 individuals. — Reinhardt Bodenbender, Robert Carlson, Dick Ellis, Vernie Swanson, Roger Slaby, Margaret E. Engstrom.

222. Morrison (Whiteside Co.), Ill. (timbered pasture 70%, farmland 30%). — Dec. 26; 9 a.m. to 4:30 p.m. Clear; temp. 27° to 32°. Observers together. Total hours, 7½; total miles, 7 (on foot). Red-tailed hawk, 1; marsh hawk, 1; sparrow hawk, 1; bob-white, 12; red-bellied woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 4; horned lark, 5; blue jay, 5; Am. crow, 2; black-capped chickadee, 7; white-breasted nuthatch, 1; brown creeper, 1; starling, 5; English sparrow, 61; cardinal, 5; tree sparrow, 4. **Total,** 17 species; 117 individuals. — Calvin C. Remmers, John C. Aggen.

223. Park Ridge (Cook Co.), Ill. (along the Des Plaines River between Lawrence Ave. and Oakton St. and eastward covering approximately 5 square miles; cultivated farmland 10%, deciduous forest 75%, marsh 5%, grassland 10%). — Dec. 26; 6:45 a.m. to 3:30 p.m. Clear, 2-in. snow; ground frozen; only small areas of the river open; wind W, under 5 m.p.h.; temp. 18° to 31°. Observers together. Total hours, 8¾; total miles, 24 (on foot). Red-tailed hawk, 1; red-shouldered hawk, 2; sparrow hawk, 1; ring-necked pheasant, 6; herring gull, 1; yellow-shafted flicker, 3; hairy woodpecker, 8; downy woodpecker, 15; Am. crow, 21; black-capped chickadee, 60; tufted titmouse, 2; white-breasted nuthatch, 2; brown creeper, 30; winter wren, 1; robin, 1; starling, 8; English sparrow, 31; cardinal, 31; purple finch, 2; Am. goldfinch, 18; slate-colored junco, 13; tree sparrow, 10; song sparrow, 6. **Total,** 23 species; 273 individuals. — Donald P. Duncan, Frank H. Wadsworth.

224. Rockford, Ill. (Searles Memorial Park, Page Conservation Park, Pecatonica River area of Harrison Township, Honnonega Forest Preserve, Love's Park, Illinois and Rock River swamp and adjacent woods, open fields and marshland 15%, creek and river borders 10%, deciduous woodlands 50%, bottomlands 15%, coniferous woods 10%). — Dec. 21; 7 a.m. to 4:30 p.m. Cloudy most of day with occasional short sunny periods; temp 20° to 36° to 30°; calm all day; heavy frost at start, snow traces in shaded areas, otherwise ground bare; all creeks and rivers partially frozen. Observers together. Total hours, 8; total miles, 45 (20 on foot, 25 by car between points of observations). Mallard, 12; goshawk, 1; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 4; red-shouldered hawk, 1; Am. rough-legged hawk, 1; marsh hawk, 1; sparrow hawk, 1; ring-necked pheasant, 15; screech owl, 1; horned owl, 2; barred owl, 1; short-eared owl, 1; belted kingfisher, 1; yellow-shafted flicker, 105 (over 90 in one flock in cut corn field, and bordering trees); red-bellied woodpecker, 7; red-headed woodpecker, 12; hairy woodpecker, 1; downy woodpecker, 16; horned lark, 2; blue jay, 31; Am. crow, 133; black-capped chickadee, 21; tufted titmouse, 12; white-breasted nuthatch, 12; brown creeper, 2; golden-crowned kinglet, 1; northern shrike, 1; starling, 3028 (mostly roosting downtown); myrtle warbler, 1; English sparrow, 5126 (mostly roosting downtown); eastern meadowlark, 1; western meadowlark, 1 (both meadowlarks were in song); cardinal, 8; Am. goldfinch, 18; slate-colored junco, 34; tree sparrow, 75; swamp sparrow,

2; Lapland longspur, 1. **Total,** 40 species; 8695 individuals. (Seen during the week: bald eagle, bobwhite, herring gull.) — Don S. Prentice, Harold E. Bennett.

225. Springfield, Ill. (same area as in previous years, radiating 7½ miles from Springfield as center, and including Lake Springfield). — Dec. 21; 7 a.m. to 5 p.m. Cloudy; wind NW, moderate; temp. 34°. Twenty observers in 11 groups. Total hours, 56. Canada goose, 53; mallard, 500 (est.); black duck, 2000 (est.); baldpate, 2; pintail, 3; ring-necked duck, 1; lesser scaup duck, 29; Am. golden-eye, 14; buffle-head, 9; hooded merganser, 5; Am. merganser, 100 (est.); red-breasted merganser, 1; Am. rough-legged hawk, 1; red-tailed hawk, 4; red-shouldered hawk, 3; sparrow hawk, 7; bobwhite, 27; ring-billed gull, 100 (est.); mourning dove, 50; horned owl, 1; barred owl, 1; screech owl, 1; belted kingfisher, 1; yellow-shafted flicker, 59; red-bellied woodpecker, 49; red-headed woodpecker, 22; yellow-bellied sapsucker, 1; hairy woodpecker, 13; downy woodpecker, 47; horned lark, 4; blue jay, 140; Am. crow, 178; black-capped chickadee, 232; tufted titmouse, 163; white-breasted nuthatch, 34; brown creeper, 63; winter wren, 3; Carolina wren, 9; mockingbird, 4; robin, 1; eastern bluebird, 9; golden-crowned kinglet, 13; cedar waxwing, 6; starling, 5000 (est.); English sparrow, 600 (est.); cardinal, 174; purple finch, 6; Am. goldfinch, 104; eastern towhee, 1; slate-colored junco, 430; tree sparrow, 146; chipping sparrow, 1; white-crowned sparrow, 1; white-throated sparrow, 1; fox sparrow, 5; song sparrow, 19. **Total,** 56 species; approximately 10,451 individuals. — Dr. and Mrs. Richard Allyn, Russell W. Carter, Lola Carter, Mr. and Mrs. Herman Eifert, Lena and Lois Hardbarger, Beatrice and Lois Hopwood, Mr. and Mrs. Al Kaszynski, N. E. Nilsson, Wm. V. O'Brien, Opel M. Rippey, Bill Robertson, W. A. Sausaman, Mr. and Mrs. Claude E. Sellers, Daisy Thompson (members, Springfield Nature League).

226. Appleton, Wis. (alder, willow, hardwood, cedar, and tamarack swamp 25%, river banks 25%, open fields 10%, city parks and streets 5%, ravine and cemetery 10%, lake fronts and hardwoods 25%). — Dec. 21; 7:30 a.m. to 4:30 p.m. Sunny all day; temp. 20° to 24°; wind SE, 1-5 m.p.h.; 6-7 inches of crusted snow; river open, lake partly frozen. Eight observers in 2 parties. Total hours, 16 (11 on foot, 5 by car); total miles, 50 (20 on foot, 30 by car). Mallard, 19; black duck, 28; Am. golden-eye, 550; Am. merganser, 25; sparrow hawk, 1; herring gull, 29; hairy woodpecker, 2; downy woodpecker, 11; blue jay, 17; Am. crow, 2; black-capped chickadee, 26; white-breasted nuthatch, 20; brown creeper, 4; golden-crowned kinglet, 3; starling, 42; English sparrow, 275; cardinal, 5; purple finch, 3; goldfinch, 3; junco, 58; tree sparrow, 2; white-throated sparrow, 1; song sparrow, 1. **Total,** 23 species; 1127 individuals. (1 European partridge found freshly killed by impact with a fence.) — Walter E. Rogers, Luther H. Rogers, Mrs. H. L. Playman, Miss Doris Pickert, Dexter Wolfe, John Walworth, Kenneth Dean, Mrs. Walter E. Rogers.

227. Green Bay, Wis. (city parks, cemeteries and surrounding country; city 15%, bay shore, river edge and marsh, 40%, upland woods 35%, fields 10%). — Dec. 28; 8 a.m. to 3 p.m. Cloudy; temp. 18° to 23°; wind NW, gentle; less than 2 inches of snow in city, 4 to 5 inches in sheltered places in country. Seven observers in 4 parties. Total miles, 56 (39 by car, 17 by foot). Mallard, 6; ring-necked pheasant, 3; herring gull, 11; mourning dove, 12 (E. C.); hairy woodpecker, 1; downy woodpecker, 4; blue jay, 14; Am. crow, 5; black-capped chickadee, 45; white-breasted nuthatch, 13; red-breasted nuthatch, 1; brown creeper, 3; robin, 1; golden-crowned kinglet, 2; northern shrike, 2; starling, 183; English sparrow, 383; Am. goldfinch, 23; slate-colored junco, 11; song sparrow, 1 (E. C.); snow bunting, 2000 (one flock). **Total,** 21 species; 2722 individuals. — Chester Krawczyk, Mrs. Andrew Weber, Elmer Strehlow, R. P. Hussong, Bob Fellow, Edwin Cleary and E. O. Paulson (Green Bay Bird Club).

228. Kenosha, Wis. (same area as in 1946; farm roads and adjoining fields 52%, heavy deciduous woodland 24%, farm woodlots 11%, lake front 10%, marshland 3%). — Dec. 26; 7:15 a.m. to 12:30 p.m., 2:00 to 4:45 p.m. Clear; temp. 17° to 32°; wind NW, 1-7 mp.h.; most of the ground covered with light snow; very little ice on the lake. One observer in a.m.; 2 together in p.m. Total hours, 8 (on foot); total miles, 9 (on foot). Am. golden-eye, 4; Am. merganser, 300 (est.); herring gull, 30; downy woodpecker, 4; Am. crow, 26; brown creeper, 1; starling, 64; English sparrow, 61; slate-colored junco, 1; tree sparrow, 34. **Total,** 10 species; approximately 525 individuals. — Wilbert Carroll, Joseph F. Healy.

229. Lake Geneva, Wis. (around lake by car; lake front 30%, cattail marsh 10%, swamps 25%, open farmland 5%, tamarack swamp 5%, deciduous woods 25%). — Dec. 21; 7 a.m. to 4:30 p.m. Clear; temp. 25° to 30°; wind W, 0-5 m.p.h.; lake entirely open. Observers together. Total miles, 33 (25 by car, 8 on foot). Pied-billed grebe, 42; Canada goose, 750; mallard, 250; black duck, 200; ring-necked duck, 11; canvas-back, 23; scaup duck [sp.], 15; Am. golden-eye, 250; buffle-head, 50; ruddy duck, 35; hooded merganser, 47; Am. merganser, 100; red-breasted merganser, 3; red-tailed hawk, 3; sparrow hawk, 1; ring-necked pheasant, 1; Am. coot, 1500; herring gull, 175; ring-billed gull, 1; yellow-shafted flicker, 1; downy woodpecker, 2; blue jay, 1; Am. crow, 15; black-capped chickadee, 15; white-breasted nuthatch, 2; brown creeper, 3; English sparrow, 25; cardinal, 3; Am. goldfinch, 35; slate-colored junco, 11; tree sparrow, 75; song spar-

row, 2. **Total,** 32 species; 3647 individuals. — Earl Anderson, C. O. Palmquist.

230. Milwaukee, Wis. (area approximately same as in 1946; Bender Dump, Estabrook, Grant, Greenfield, Hoyt, Jacobus, Juneau, Kern, Kinnickinnic, Kletsche, Lake, McGovern, Washington, Menomonee Parkway, Root River Parkway Parks, along north and south Lake Michigan shore; Wind Lake, fields and woods on the northwest side; woods 30%, lake shore 25%, fields 15%, river bottoms 15%, feeding stations 10%, tamarack swamp 5%). — Dec. 27; dawn to dusk. Mild, fair and sunny; temp. 25° to 35°; wind NW, 15-20 m.p.h.; ground bare; Lake Michigan open. Twenty-one observers in 9 parties, plus 6 at feeding stations. Total hours, 38 (28 on foot, 10 by car); total miles, 175 (43 on foot, 132 by car). Mallard, 230; black duck, 80; pintail, 3; green-winged teal, 1; shoveller, 20; canvas-back, 18; greater scaup duck, 2 (seen at very close range); lesser scaup duck, 1500; Am. goldeneye, 175; buffle-head, 75; old-squaw, 8; ruddy duck, 5; hooded merganser, 7; Am. merganser, 300; red-breasted merganser, 85; goshawk, 1; red-tailed hawk, 7; red-shouldered hawk, 1; marsh hawk, 3; sparrow hawk, 4; European partridge, 15; ring-necked pheasant, 70; Am. coot, 1; herring gull, 335; ring-billed gull, 75; Bonaparte's gull, 25; mourning dove, 7; screech owl, 2; horned owl, 1; long-eared owl, 3; hairy woodpecker, 4; downy woodpecker, 29; blue jay, 13; Am. crow, 179; black-capped chickadee, 63; white-breasted nuthatch, 14; red-breasted nuthatch, 1; brown creeper, 2; mocking-bird, 1 (at feeding station; present since Dec. 22. — Mrs. C. S., Mrs. M. C.); robin, 35; hermit thrush, 1 (at feeding station since Dec. 5 — Mrs. A. P. B.); golden-crowned kinglet, 4; northern shrike, 2; starling, 125; English sparrow, 150; red-wing, 35; cardinal, 19; Am. goldfinch, 12; slate-colored junco, 162; tree sparrow, 145; field sparrow, 2 (seen within 10 feet for 15 minutes under good light; pink bill very pronounced — C. F.); white-throated sparrow, 2; fox sparrow, 1; swamp sparrow, 3; song sparrow, 16. **Total,** 55 species; approximately 4079 individuals. (Seen during the week: Cooper's hawk, belted kingfisher, yellow-shafted flicker, horned lark (northern), cowbird [no details — Ed.], purple finch, white-crowned sparrow [no details — Ed.].) — Mrs. A. P. Balsom, Mrs. H. K. Cowen, Mrs. M. Cutler, Marie Daetz, Mrs. C. Decker, Mary Donald, Mrs. Arthur Erskine, C. Frister, P. Hoffmann, William Jackson, Mrs. F. L. Larkin, Mrs. L. Logeman, Helmuth Miller, Gordon Orians, H. L. Orians, Mrs. Martin Paulsen, H. Schaars, Mrs. E. Schwendener, Mrs. W. Simmons, Dr. Pearl Thompson, George Treichel.

231. Seneca, Wis. (west-central Crawford County from Seneca northwest toward Mississippi River; along Mississippi River above and below Lynxville; deciduous woodlands 50%, pasture and open farmland 10%, beaver ponds and small stream 20%, river channel 10%, river bottoms 10%). — Dec. 21. Cloudy in morning, clearing at midday; temp. 20° to 40°; wind W, 0-7 m.p.h.; ground covered with 5-in. snow; ponds frozen, stream open, river channel open. Observers together. Total hours, 7½; total miles, 46 (34 by car, 12 by foot). Common loon, 8; Am. golden-eye, 6; red-tailed hawk, 1; bald eagle, 7; horned owl, 1; barred owl, 1; red-bellied woodpecker, 8; hairy woodpecker, 3; downy woodpecker, 3; blue jay, 8; Am. crow, 4; black-capped chickadee, 20; tufted titmouse, 1; white-breasted nuthatch, 7; brown creeper, 1; starling, 15; English sparrow, 21; cardinal, 4; Am. goldfinch, 13; slate-colored junco, 6; tree sparrow, 56; song sparrow, 2. **Total,** 22 species; 196 individuals. — Clarence Paulson, Norman Larmore.

232. Waukesha, Wis. (two wooded areas in city, farmland north of city, southwest along Fox River valley to Mukwonago marsh, to Saylesville; open farm lands, 38%, deciduous woodlands 36%, tamarack swamp 10%, grassy marsh 16%). — Dec. 21; 7 a.m. to 4:30 p.m. Clear all day; temp. 25° to 34°; wind SW, 1-3 m.p.h.; ground frozen and covered with 1-3 inches of old snow; Fox River mostly open. Eight observers together. Total hours, 9½ (6 on foot, 3½ in car); total miles, 52½ (7½ on foot, 45 in car). Am. merganser, 19; red-tailed hawk, 4; Am. rough-legged hawk, 2; marsh hawk, 1; European partridge, 23 (1 covey); ring-necked pheasant, 5; long-eared owl, 1; yellow-shafted flicker, 7; hairy woodpecker, 1; downy woodpecker, 6; blue jay, 6; Am. crow, 753; black-capped chickadee, 15; white-breasted nuthatch, 2; brown creeper, 1; starling, 20; English sparrow, 127; eastern meadowlark, 1 (heard and seen); Am. goldfinch, 39; slate-colored junco, 30; tree sparrow, 151; song sparrow, 1. **Total,** 22 species; 1215 individuals. (Seen in area Dec. 24: tufted titmouse.)—Robert Adams, Vincent P. Batha, Harlow Bielefelt, E. R. Cuthbert, Walter Hahn, S. Paul Jones, Hal Lahey, Charles E. Nelson, Jr.

233. Minneapolis, Minn. (Theodore Wirth Park, Lake Harriet, Minnesota River Valley, Nine Mile Creek; river bottom 40%, city park 30%, open farmland 20%, mixed woodland 10%). — Dec. 26; 9 a.m. to 4:30 p.m. Cloudy; temp. 11° to 23°; no wind; 6-in. old snow on ground. Eleven observers in 3 parties. Total hours, 21; total miles, 31 (11 on foot, 20 by car). Mallard, 6; black duck, 3; sharp-shinned hawk, 1; ring-necked pheasant, 67; Wilson's snipe, 1; yellow-shafted flicker, 1; red-bellied woodpecker, 4; hairy woodpecker, 10; downy woodpecker, 19; blue jay, 62; Am. crow, 2; black-capped chickadee, 59; tufted titmouse, 1; white-breasted nuthatch, 27; brown creeper, 3; robin, 5; eastern bluebird, 1; golden-crowned kinglet, 2; cedar waxwing, 100; starling, 6; English sparrow, 1138; cardinal, 23; common redpoll, 3; pine siskin, 5; Am. goldfinch, 6; spotted towhee, 1 (has been coming to Mrs. Wells' window feeding shelf regularly since early November; identification verified

by Dr. W. J. Breckenridge, director of Natural History Museum, Univ. of Minn.); slate-colored junco, 52; tree sparrow, 8. **Total,** 28 species; 1616 individuals. — Lula May Aler, Mrs. Scott F. Carmean, Georgette Monroe, Mrs. C. R. Nelson, Mrs. Kenneth A Phelps, Mrs. E. D. Swedenborg, Mrs. J. A. Thompson, Mrs. P. D. Tryon, Mrs. Clarence Tolg, Mrs. William Ure, Mrs. R. H. Wells (Minneapolis Audubon Society).

234. St. Paul, Minn. (Armour Plant at South St. Paul, Pine Bend, Hastings and railroad tracks all along Mississippi River; river-bottom forest 50%, oak and birch hills along river bottomland 50%). — Dec. 28; 8:30 a.m. to 4:30 p.m. Fair to cloudy; wind NNE, 8 m.p.h.; snow on ground to 12 inches, hillsides facing west and south bare; river open. Observers together. Total hours, 8 (6 on foot, 2 by car); total miles, 48 (12 on foot, 36 by car). Mallard, 53; black duck, 2; lesser scaup duck, 2; American golden-eye, 238; Am. merganser, 350; bald eagle, 1; yellow-shafted flicker, 1; pileated woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 3; blue jay, 6; Am. crow, 1; black-capped chickadee, 6; white-breasted nuthatch, 3; robin, 3; starling, 234; English sparrow, 30; rusty blackbird, 1; cardinal, 11; Am. goldfinch, 1; tree sparrow, 34. **Total,** 21 species; 982 individuals. — Mr. and Mrs. Wm. H. Longley, Mr. J. Whipple, Mr. Carlyle Sather (St. Paul Bird Club).

235. St. Paul, Minn. (City limits to Lake Vadnais and vicinity; open fields 30%, deciduous woods 20%, planted Scotch pine and Norway spruce forest 35%, tamarack swamp 15%). — Dec. 27; 8:15 a.m. to 4:15 p.m. Fair to partly cloudy; temp. 21° to 30°; wind N, 4 m.p.h.; 8-10-in. snow, south-facing banks bare; small patch open water on canal. Fourteen observers in 2 parties. Total hours, 11 (on foot); total miles, 10½ (on foot). Mallard, 1; Am. rough-legged hawk, 1; goshawk, 3; ring-necked pheasant, 44; great horned owl, 1; barred owl, 4; hairy woodpecker, 2; downy woodpecker, 1; blue jay, 25; Am. crow, 23; black-capped chickadee, 30; tufted titmouse, 2; white-breasted nuthatch, 1; northern shrike, 1; starling, 20; English sparrow, 70; red-wing, 1; cardinal, 7; common redpoll, 14; Am. goldfinch, 20; slate-colored junco, 73; tree sparrow, 25. **Total,** 22 species; 369 individuals. — A. C. Rosenwinkel, Mr. and Mrs. Carlyle Sather, Eileen Sather, Brother Pious, Leonard Lustig, Robert Walsh, Dorothy Sundry, James Schartz, Bob Keenan, Jack Olson, Tom Meyer, James Walters, James Duchaine (St. Paul Bird Club).

236. Ames, Iowa (same area as 1946; woodland 70%, open pasture 30%). — Dec. 23; 8 a.m. to 5 p.m. Clear; ground mostly bare; temp. 17° to 26°. Nine observers in 1 party for 4 hours, 2 parties for 3 hours. Total hours, 10 (on foot); total miles, 18 (on foot). Marsh hawk, 1; barred owl, 3; yellow-shafted flicker, 5; red-bellied woodpecker, 3; hairy woodpecker, 3; downy woodpecker, 4; blue jay, 6; Am. crow, 13; black-capped chickadee, 9; tufted titmouse, 5; white-breasted nuthatch, 18; brown creeper, 3; winter wren, 1; starling, 2; English sparrow, 20; slate-colored junco, 107; tree sparrow, 3. **Total,** 17 species; 206 individuals. — R. F. Trump, Jim Robertson, Bob Griffin, George Wyatt, Phil Pearson, Paul Kirby, Bob Walser, Jim Anglehorn, Dick Fincham.

237. Cedar Falls, Iowa (Goose Lake, Beaver Creek, Union Bridge, Snag Creek, Josh Higgins Park; river-bottoms 35%, upland forest 25%, savannas 25%, fields 10%, marshes 5%). — Dec. 24; 7:30 to 12 a.m., 1 to 4 p.m. Two hours of fog, rest of day clear; temp. 14° to 30°; no wind; ground partly covered with 1-in. snow. Total hours, 7½ (6½ on foot, 1 in car); total miles, 36 (12 on foot, 24 by car). Goshawk, 1; ring-necked pheasant, 1; horned owl, 1; barred owl, 1; belted kingfisher, 1; red-bellied woodpecker, 4; hairy woodpecker, 3; downy woodpecker, 10; blue jay, 15; Am. crow, 75; black-capped chickadee, 18; tufted titmouse, 2; white-breasted nuthatch, 8; brown creeper, 5; starling, 30; English sparrow, 30; cardinal, 7; Am. goldfinch, 6; slate-colored junco, 24; tree sparrow, 30. **Total,** 20 species; 272 individuals. — Martin L. Grant, Russell Hays, C. W. Robertson, Maybelle Brown, Blanche Schwanke, Myrtle Gaffin.

238. Davenport, Iowa (Duck Creek Park; along Locust St., Middle Road, and Creek to Devils' Glen; Credit Island and nearby shore area along Mississippi River; through fields to Fairmont Cemetery). — Dec. 25; 6:40 a.m. to 4 p.m. Cloudy in a.m.; clear in p.m.; temp. 24° to 37°; wind W, 5-15 m.p.h. at first, increasing to 25 m.p.h. in p.m.; ground bare; creeks and ponds frozen; river at Credit Island open except near shore. Total miles, about 14 (on foot). Red-tailed hawk, 1; red-shouldered hawk, 2; bald eagle, 1; herring gull, 25; red-bellied woodpecker, 4; red-headed woodpecker, 4; downy woodpecker, 9; blue jay, 17; Am. crow, 17; black-capped chickadee, 32; tufted titmouse, 4; white-breasted nuthatch, 5; brown creeper, 2; olive-backed thrush, 1 (Credit Island noted through glass at 16 ft., for about 5 minutes; unusual straggler [=hermit thrush — Ed.]); starling, 32; English sparrow, 278; cardinal 5; purple finch, 1; Am. goldfinch, 2; slate-colored junco, 26; tree sparrow, 8; song sparrow, 1. **Total,** 22 species; 477 individuals. — C. F. Mueller.

239. Des Moines, Iowa (Charles Sing Denman Wood, Greenwood and Ashworth Parks, Walnut Woods State Park, Des Moines Water Works Impounding Reservoir, Crocker Woods and Waukonsa Park along the Des Moines River, Pine Hill Cemetery, Fisher's Lake, Sycamore Park, Dove Woods along Beaver Creek, Brenton Slough, Kinglet Woods, roadsides and open fields adjoining woodlands [no appraisal of cover types — Ed.]). — Dec. 21; 7:45 a.m. to 5:15 p.m. Mostly clear; wind, 7

m.p.h.; temp. 18° to 37°; ground bare. Seventeen observers in 5 parties. Total hours afield, 40 (33 on foot, 7 by car); total party-miles, 159 (28 on foot, 131 by car). Great blue heron, 1; blue goose [no details — Ed.], 2; Canada goose, 20; mallard, 7060; pintail, 20; redhead, 1; Am. merganser, 28; red-tailed hawk, 3; red-shouldered hawk, 2; marsh hawk, 4; sparrow hawk, 3; Am. coot, 11; mourning dove, 1; screech owl, 1; barred owl, 5; short-eared owl, 1; saw-whet owl, 1; belted kingfisher, 6; yellow-shafted flicker, 37; red-bellied woodpecker, 9; red-headed woodpecker, 3; hairy woodpecker, 16; downy woodpecker, 62; blue jay, 46; Am. crow, 276; black-capped chickadee, 274; tufted titmouse, 35; white-breasted nuthatch, 48; brown creeper, 10; golden-crowned kinglet, 3; starling, 533; English sparrow, 896; red-wing, 33; rusty blackbird, 40; cardinal, 97; Am. goldfinch, 80; slate-colored junco, 226; tree sparrow, 552; Harris's sparrow, 2; white-throated sparrow, 2; song sparrow, 8. **Total,** 41 species; 10,458 individuals. — Mrs. Jos. N. Chamberlain, Miss Irene M. Smith, Miss Ruth Chapman, Miss Annette Wilbois, Mrs. Toni R. Wendelburg, Miss Olivia McCabe, Miss Elizabeth Peck, Mrs. W. G. DuMont, Mrs. A. J. Binsfeld, Joe K. Brown, Mrs. Albert Berkowitz, Albert Berkowitz, Woodward Brown, Mrs. Harold R. Peasley, Mrs. Lester W. Haskell, Lester W. Haskell, Bruce Stiles (Des Moines Audubon Society).

240. Dubuque, Iowa (Linwood and Mount Calvary Cemeteries, Eagle Point Park, City Island, Mississippi River sloughs and road to Sinope Creek in Wisconsin; open fields 10%, pine woodland 15%, deciduous woodland 35%, river sloughs 40%). — Dec. 21; 8 to 12 a.m., 1:30 to 4:30 p.m. Clear to partly cloudy; temp. 25° to 40°; no wind; ground with small amount of old snow in sheltered places; river open below dam and in small pools in channel above. Seven observers together. Total hours, 7; total miles, 11 (7 on foot, 10 by car). Am. golden-eye, 16; Am. merganser, 53; bald eagle, 9; screech owl, 1; belted kingfisher, 2; yellow-shafted flicker, 9; pileated woodpecker, 4; red-bellied woodpecker, 5; yellow-bellied sapsucker, 1; hairy woodpecker, 4; downy woodpecker, 11; blue jay, 25; Am. crow, 136; black-capped chickadee, 15; tufted titmouse, 4; white-breasted nuthatch, 11; brown creeper, 2; winter wren, 1 (J. D.); robin, 4; golden-crowned kinglet, 5; Bohemian waxwing, 2; cedar waxwing, 24; starling, 7; English sparrow, 187; cardinal, 29; purple finch, 2 (P. R.); Am. goldfinch, 5; slate-colored junco, 94; tree sparrow, 91. **Total,** 29 species; 759 individuals. — James Dockal, Henry Herrmann, Howard Hintz, Ival Schuster, Mrs. Pauline Ruegnitz, Mr. and Mrs. George Crossley (Dubuque Audubon Club).

241. Mt. Vernon, Iowa (center of town south to Ivanhoe, southeast of Ivanhoe along Cedar River, Dark Hollow in Palisades-Kepler State Park, north of town to old golf course and Ink's Pond; open farmland 50%, deciduous woodland 45%, town 5%). — Dec. 24; 7 to 11:30 a.m., 1:30 to 4:30 p.m. Clear; temp. 16° to 35°; wind NE 1-7 m.p.h.; ground bare; Cedar River partly frozen. Observers together. Total hours, 7½; total miles, 14. Red-tailed hawk, 1; sparrow hawk, 1; horned owl, 1; belted kingfisher, 1; red-bellied woodpecker, 5; hairy woodpecker, 1; downy woodpecker, 4; blue jay, 8; Am. crow, 18; black-capped chickadee, 16; tufted titmouse, 1; white-breasted nuthatch, 7; brown creeper, 2; winter wren, 2; cedar waxwing, 30; starling, 7; English sparrow, 26; cardinal, 7; Am. goldfinch, 1; slate-colored junco, 4; tree sparrow, 41; song sparrow, 4. **Total,** 22 species; 188 individuals.— John C. W. Bliese, J. David Ennis, J. Harold Ennis.

242. Newton (Jasper Co.), Iowa (Westwood Park south along Cherry Creek to South Skunk River below Metz for 2 miles; open farmland 10%, timbered creek-bottom 65%, elm-timbered river bottom 25%). — Dec. 28; dawn to dusk. Clear sky all day; temp. 20° to 35° to 30°; wind NW, less than 5 m.p.h.; ground bare; 4 inches of ice on river. Three observers together. Total hours, 10; total miles, 19 (on foot). Red-tailed hawk, 4; marsh hawk, 1; bob-white, 21; ring-necked pheasant, 2; mourning dove, 30; barred owl, 1; yellow-shafted flicker, 9; red-bellied woodpecker, 4; hairy woodpecker, 3; downy woodpecker, 14; horned lark, 5; blue jay, 7; Am. crow, 33; black-capped chickadee, 25; tufted titmouse, 21; white-breasted nuthatch, 1; eastern bluebird, 4; starling, 10; English sparrow, 147; cardinal, 30; slate-colored junco, 54; tree sparrow, 126; song sparrow, 2. **Total,** 23 species; about 554 individuals. — John Paul Moore, Konnie Yoshinaga, Bradley McMain.

243. Sioux City (Woodbury Co.), Iowa (same areas as in 1946; hilly deciduous woodland and pine and cedar growth 50%, river and lake country and wooded lowlands 30%, open hills 15%, town 5%). — Dec. 21; 9 a.m. to 7 p.m. Hazy, bright to clear at 10:30 a.m., remainder of day sunny; temp. 16° to 37°; wind N, 5-15 m.p.h.; ground in many sections covered with 6-8 inches of well-packed snow and ice, some snow on hills; rivers open in main channels; lakes frozen over, some thawing in p.m.; heavy hoarfrost on all vegetation until 10:30 a.m. Eighteen observers in 10 parties. Total hours afield and station observation, 10; total miles, 177 (126 by car, 51 by foot). Mallard, 1; Am. merganser, 3; red-tailed hawk, 4; prairie falcon, 1 (Z. C. L.); ring-necked pheasant, 1; screech owl, 1 (red phase); horned owl, 3; belted kingfisher, 1; yellow-shafted flicker, 23; red-bellied woodpecker, 2; hairy woodpecker, 10; downy woodpecker, 36; blue jay, 6; Am. crow, 10,140 (part est.); black-capped chickadee, 182; white-breasted nuthatch, 28; red-breasted nuthatch, 2; brown creeper, 9; robin, 1; eastern bluebird, 3; golden-crowned kinglet, 4; ruby-crowned kinglet, 1; northern shrike, 1 (Z. C. L.); starling, 400 (est.); English sparrow,

885 (est.); meadowlark [sp.], 1; red-wing, 300 (est.); cardinal, 20; pine siskin, 34; Am. goldfinch, 21; slate-colored junco, 31; tree sparrow, 33; song sparrow, 2. **Total,** 33 species; 12,190 individuals. — Mr. and Mrs. Herrold Asmussen, W. W. Barrett, Don Bushar, Mrs. Dwight F. Davis, Mrs. E. A. Emery, Karl Kuhlmann, Dale Laffoon, Mr. and Mrs. Jean L. Laffoon, Zell C. Lee, Nick Margeas, Bob Nickolson, Dr. and Mrs. John L. Schott, Gertrude Weaver, Bertha Wellhausen, Carl Wellhausen.

244. Kansas City, Mo. (Swope Park; area west of Parkville, Mo.; Quivira Lake, Wyandotte and Johnson Counties, Kans.; Wyandotte County Lake, Kans.; brushy fields 40%, deciduous woodlands 30%, lake 20%, coniferous groves 4%, open farmland 3%, cattail marsh 3%). — Dec. 21; 7:30 a.m. to 4:15 p.m. Overcast, with heavy fog most of day; temp. 23° to 36°; wind 5-12 m.p.h. Eighteen observers in 6 parties. Total hours, 32 (30 on foot, 2 by car); total miles, 60 (34 on foot, 26 by car). Pied-billed grebe, 2; mallard, 1125 (est.); black duck, 5; gadwall, 3; baldpate, 1; pintail, 14; redhead, 1; ring-necked duck, 8; canvas-back, 6; lesser scaup duck, 1; Am. golden-eye, 29; ruddy duck, 1; Am. merganser, 309; red-breasted merganser, 1 (blended throat of female clearly seen — E. C., H. C. H.); sharp-shinned hawk, 2; buteo hawk (sp.), 3; red-tailed hawk, 6; Harlan's hawk, 1 (E. C., H. C. H.); red-shouldered hawk, 1; sparrow hawk, 3; bob-white, 2; Am. coot, 8; horned owl, 2; short-eared owl, 1; belted kingfisher, 1; yellow-shafted flicker, 69; pileated woodpecker, 1 (J. M.); red-bellied woodpecker, 18; yellow-bellied sapsucker, 3; hairy woodpecker, 8; downy woodpecker, 56; blue jay, 24; Am. crow, 42; black-capped chickadee, 123; tufted titmouse, 57; white-breasted nuthatch, 18; brown creeper, 20; winter wren, 3; Carolina wren, 9; long-billed marsh wren, 1 (has been observed regularly in cattails since Oct. 6 — E. C., M. H., H. C. H.); mockingbird, 1; robin, 5; eastern bluebird, 63; golden-crowned kinglet, 5; ruby-crowned kinglet, 1; cedar waxwing, 8; loggerhead shrike, 1; starling, 392; myrtle warbler, 13; English sparrow, 93; eastern meadowlark, 2; red-wing, 3; cardinal, 158; Am. goldfinch, 74; eastern towhee, 3; slate-colored junco, 778; Oregon junco, 2 (brown back and sides — J. B., H. H.); tree sparrow, 250; Harris's sparrow, 2; white-crowned sparrow, 2; white-throated sparrow, 5; fox sparrow, 6; swamp sparrow, 6; song sparrow, 225. **Total,** 63 species; 4086 individuals. (Seen in area Dec. 20 by Bishop: common loon, 16; Dec. 28 by H. Hedges, Bishop, and Figley: Lincoln's sparrow, 1 [no details — Ed.].) — John Bishop, Elizabeth Cole, Rilla Hammat, Henry Harford, Margaret Hedges, Harold C. Hedges, Aileen Lanoix, Annette Moore, Jim Myers, Mary Louise Myers, Earl T. Newton, Jr., Esther L. O'Connor, F. J. Rodgers, Mrs. F. J. Rodgers, Marlene Rodgers, Willis Rodgers, Bernice Tatum, Michael W. Valentine (Burroughs Club of Kansas City).

245. Peruque (St. Charles Co.), Mo. (including Creve Coeur Lake, in St. Louis Co. and Marais Temps Clair, Marais Croche, Weber Lake, and surrounding Dardenne area, all near the confluence of the Missouri and Mississippi Rivers; deciduous woods 35%, farmland 15%, marsh land 35%, water 15%). — Dec. 28; 8 a.m. to 5 p.m. Fair; ground clear, frozen to thawing in a.m., soggy, p.m.; wind, NW 1-4 m.p.h.; temp 28° to 42°. Eleven observers in 3 parties. Total hours, 8 (on foot); total miles 25 (on foot). Mallard, 68; black duck, 5; baldpate, 1; pintail, 4; scaup duck, 3; Am. golden-eye, 5; ruddy duck, 5; Am. merganser, 3; Cooper's hawk, 1; red-tailed hawk, 4; red-shouldered hawk, 2; Am. rough-legged hawk, 2; bald eagle, 3; marsh hawk, 4; sparrow hawk, 8; bob-white, 14; killdeer, 1; herring gull, 154; ring-billed gull, 4; mourning dove, 21; barn owl, 1; yellow-shafted flicker, 38; pileated woodpecker, 1; red-bellied woodpecker, 16; red-headed woodpecker, 32; yellow-bellied sapsucker, 5; hairy woodpecker, 1; downy woodpecker, 12; horned lark, 24; tree swallow, 6 (W. N. K.); blue jay, 18; Am. crow, 231; Carolina chickadee, 24; black-capped chickadee, 13; tufted titmouse, 26; white-breasted nuthatch, 4; brown creeper, 10; Carolina wren, 4; mockingbird, 1; robin, 31; eastern bluebird, 11; golden-crowned kinglet, 4; ruby-crowned kinglet, 2; cedar waxwing, 2; starling, 117; myrtle warbler, 5; English sparrow, 15; red-wing, 20; bronzed grackle, 12; cowbird, 25; cardinal, 42; Am. goldfinch, 5; eastern towhee, 1; slate-colored junco, 137; tree sparrow, 205; field sparrow, 4; white-crowned sparrow, 1; song sparrow, 5. **Total,** 58 species; 1423 individuals. (Seen in area, Dec. 27: shoveller, 1; hooded merganser, 1; belted kingfisher, 1; winter wren, 1; loggerhead shrike, 1; meadowlark [sp.], 1; rusty blackbird, 1; white-throated sparrow, 1; swamp sparrow, 1.) — Beulah Bedell, Bernard Dell, Daniel A. Gleize, Vivien Henry, William N. Kelley, Harrison Lischer, Baker Long, Bill Mahne, Don Menke, Nell Menke, Edward Oecksle (St. Louis Audubon Society).

246. Ranken (St. Louis Co.), Mo. (tract between Valley Park and Eureka 6 miles long, 4 miles wide; deciduous woods on Ozark hillslopes 40%, open valleys bordering spring-fed creeks 40%, red-cedar groves 10%, farm land 10%). — Dec. 21; 8:30 a.m. to 4:30 p.m. Cloudy, clearing by 10 a.m.; ground clear, hard, thawing in p.m.; wind SW, 1 m.p.h.; temp. 28° to 38°. Eighteen observers in 4 parties. Total hours, 7 (on foot); total miles, 16 (on foot). Red-tailed hawk, 3; Am. rough-legged hawk, 1; sparrow hawk, 2; killdeer, 3; Wilson's snipe, 1; mourning dove, 1; belted kingfisher, 8; yellow-shafted flicker, 23; pileated woodpecker, 8; red-bellied woodpecker, 23; yellow-bellied sapsucker, 8; hairy woodpecker, 16; downy woodpecker, 36; blue jay, 16; Am. crow, 35; chickadee [sp.], 37; tufted titmouse, 58; white-breasted nuthatch, 22; brown creeper, 4; winter wren, 1; Carolina wren, 38; mockingbird, 3; robin, 87; hermit thrush, 1;

(very late date — R. L. H.); eastern bluebird, 56; golden-crowned kinglet, 3; cedar waxwing, 69; starling, 12; myrtle warbler, 21; English sparrow, 21; cardinal, 112; purple finch, 16; Am. goldfinch, 33; slate-colored junco, 605; tree sparrow, 57; field sparrow, 11; song sparrow, 7. **Total,** 37 species; 1458 individuals. — Beulah Bedell, Clara J. Beerman, Alberta M. Bolinger, Bill Bremser, J. Earl Comfort, Ellen Cone, A. W. Dreyer, Susan Grummann, J. Vivian Henry, R. Ludlow Hill, J. P. Jackson, E. Knapp, J. Marshall Magner, K. E. Niewoehner, Stuart L. O'Byrne, Richard W. Reichle, Jr., Hattie Stones, Jack Van Benthuysen (Webster Groves Nature Study Society).

247. Thayer, Mo. (town and surrounding area 3 miles north and east, and 4 miles west, Mammoth Spring across Arkansas border and State Fish Hatchery adjoining, plus 2 miles of Spring River; farm woodlots 50%, open farmlands 25%, river bottom 25%). — Dec. 26; dawn to dark. Fair; temp. 32° to 52°; wind N, 0-5 m.p.h.; ground bare; running water open, ponds lightly ice-covered. Observers together. Total hours, 9 (8 on foot, 1 in car); total miles, 9. Pied-billed grebe, 21; great blue heron, 1; Cooper's hawk, 1; red-tailed hawk, 1; killdeer, 1; Wilson's snipe, 1; mourning dove, 2; screech owl, 1; belted kingfisher, 5; yellow-shafted flicker, 4; pileated woodpecker, 1; red-bellied woodpecker, 2; red-headed woodpecker, 15; downy woodpecker, 4; blue jay, 23; Am. crow, 12; Carolina chickadee, 10; tufted titmouse, 18; white-breasted nuthatch, 7; mockingbird, 4; robin, 70; eastern bluebird, 12; cedar waxwing, 35 (est.); loggerhead shrike, 1; starling, 8; English sparrow, 100 (est.); cardinal, 33; purple finch, 1; Am. goldfinch, 9; slate-colored junco, 60 (est.); tree sparrow, 2; field sparrow, 1; white-throated sparrow, 7; song sparrow, 1 (seen at 15 ft. in sunlight — C. L. C.). **Total,** 34 species; 444 individuals. (Seen in area Dec. 20: brown creeper, 1.) — C. L. Criswell, Patty and Michael Smith.

248. Texarkana, Ark.-Tex. (starting where Highway 67 crosses Red River 7 miles north of town; 75% of route lay in Texas, 25% in Arkansas along Red River; open farmlands 25%, pastures 25%, woodlands 25%, cut-over woodlands 15%, small lakes 10%). — Dec. 28; 9 a.m. to 4:30 p.m. Clear; temp. 38° to 60° F.; no wind. Observers together. Total hours, 8½; total miles, 7½ (on foot). Great blue heron, 6; turkey vulture, 8; black vulture, 3; Cooper's hawk, 1; red-tailed hawk, 1; red-shouldered hawk, 2; Am. rough-legged (?) hawk, 1; marsh hawk, 4; sparrow hawk, 3; bob-white, 16; killdeer, 10; red-shafted flicker, 5; red-bellied woodpecker, 4; red-headed woodpecker, 2; downy woodpecker, 2; blue jay, 14; Am. crow, 39; black-capped chickadee, 3; Bewick's wren, 4; mockingbird, 7; hermit thrush, 1; eastern bluebird, 2; blue-gray gnatcatcher, 1; ruby-crowned kinglet, 3; loggerhead shrike, 4; starling, 838; myrtle warbler, 8; English sparrow, 41; meadowlark [sp.], 47; red-wing, 355; boat-tailed grackle, 29; bronzed grackle, 29; cowbird, 114; cardinal, 23; vesper sparrow, 3; slate-colored junco, 45; tree sparrow, 1; field sparrow, 6; Harris's sparrow, 5; fox sparrow, 5; song sparrow, 1. **Total,** 41 species; 1696 individuals. — Charles Gardner, Sonny Greenwood.

249. Alexandria, La. (same area as in 1946; river-bottom forest 40%, farmland 10%, mixed pines and hardwoods 25%, uncultivated fields 20%, pine woods 5%). — Dec. 20; 7:30 a.m. to 3:30 p.m. Fair; temp. 38° to 65°; no wind in a.m., NE 1-7 m.p.h. in p.m.; ground relatively dry, no flooded areas, stage of Red River 17.9 ft. Observers together. Total hours, 8 (on foot); total miles, 12 (on foot). Turkey vulture, 8; black vulture, 3; red-tailed hawk, 4; killdeer, 33; mourning dove, 1; barred owl, 1; belted kingfisher, 1; yellow-shafted flicker, 7; red-bellied woodpecker, 8; yellow-bellied sapsucker, 5; hairy woodpecker, 1; downy woodpecker, 1; eastern phoebe, 5; blue jay, 16; Am. crow, 14; Carolina chickadee, 5; tufted titmouse, 10; brown creeper, 1; Carolina wren, 10; mockingbird, 4; brown thrasher, 1; robin, 516; hermit thrush, 2; eastern bluebird, 17; golden-crowned kinglet, 6; ruby-crowned kinglet, 2; cedar waxwing, 78; loggerhead shrike, 13; blue-headed vireo, 2; orange-crowned warbler, 4; myrtle warbler, 4; eastern meadowlark, 22; grackle, 8; cardinal, 15; Am. goldfinch, 51; Savannah sparrow, 9; pine-woods sparrow, 6; slate-colored junco, 40; field sparrow, 18; white-throated sparrow, 46; swamp sparrow, 8; song sparrow, 11. **Total,** 42 species; 1017 individuals.—A. W. Lockwood, R. M. Lockwood.

250. New Orleans, La. (Canal and Scott Streets to Canal Boulevard, City Park, Lee Boulevard, along Lake Pontchartrain front to Little Woods, to Highway 90, return to starting point; swamp and marsh 10%, wooded area 10%, lake front 20%, park area 60%). — Dec. 23. Partly cloudy for several hours, clear most of day; temp. 58° to 62°; wind N, 5 m.p.h. Total hours, 11 (on foot and in car); total miles, 54 (14 on foot, 40 in car). Pied-billed grebe, 11; brown pelican, 3; double-crested cormorant, 9; great blue heron, 3; Am. egret, 1; gadwall, 1; baldpate, 1; redhead, 6; lesser scaup duck, 28; Am. golden-eye, 1; marsh hawk, 1; sparrow hawk, 1; bob-white, 6; Am. coot, 115; killdeer, 131; Wilson's snipe, 16; herring gull, 1; ring-billed gull, 3; laughing gull, 1; Bonaparte's gull, 1; Forster's tern, 2; mourning dove, 26; belted kingfisher, 3; yellow-shafted flicker, 4; downy woodpecker, 1; eastern phoebe, 2; vermilion flycatcher, 2; tree swallow, 25; blue jay, 6; Am. crow, 3; fish crow, 24; house wren, 1; Carolina wren, 2; long-billed marsh wren, 2; mockingbird, 19; brown thrasher, 1; robin, 6; ruby-crowned kinglet, 3; Am. pipit, 36; loggerhead shrike, 7; starling, 171; orange-crowned warbler, 1; myrtle warbler, 4; English sparrow, 6; eastern meadowlark, 7; red-wing, 142; boat-tailed grackle, 7; grackle

(purple or bronzed), 25; cardinal, 1; eastern towhee, 1. **Total,** 50 species; approximately 880 individuals. — Earle R. Greene.

251. St. Francisville, La. (south near Mississippi River to Port Hudson; pine forest east of town; lower end of Thompson Creek; east bank of False River to Grand Lake and north along Mississippi River levee to St. Francisville ferry; lake shore 25%, marsh 2%, deciduous bottomland 20%, hardwood upland 30%, pine forest 8%, open fields 15%). — Dec. 27; 1 to 4 a.m., 5:30 a.m. to 5:30 p.m. Clear; temp. 32° to 67°; wind W, 0-10 m.p.h. Ten observers in 4 parties. Total hours in daylight, 42 (27 on foot, 7 by car, 2 by rowboat); total hours in darkness, 3 (on foot); total miles in daylight, 80 (31 on foot, 47 by car, 2 by rowboat); total miles in darkness, 7 (on foot). Horned grebe, 67; pied-billed grebe, 218; double-crested cormorant, 1087 (part est.); great blue heron, 11; mallard, 1; ring-necked duck, 20; canvas-back, 291; scaup-duck (sp.), 854; Am. golden-eye, 2; buffle-head, 12; ruddy duck, 6020 (part est.); turkey vulture, 26; black vulture, 83; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 21 red-shouldered hawk, 7; marsh hawk, 6; duck hawk, 1; sparrow hawk, 16; bob-white, 75 (part est.); Am. coot, 222; killdeer, 368; woodcock, 1; Wilson's snipe, 26; least sandpiper, 79 (including 1 "albino"); semipalmated sandpiper, 3 (Lockwoods); western sandpiper, 25; herring gull, 1; ring-billed gull, 30; Forster's tern, 10; mourning dove, 18; horned owl, 1; barred owl, 10; belted kingfisher, 35; yellow-shafted flicker, 11; pileated woodpecker, 4; red-bellied woodpecker, 12; red-headed woodpecker, 4; yellow-bellied sapsucker, 11; hairy woodpecker, 3; downy woodpecker, 12; eastern phoebe, 31; tree swallow, 13; rough-winged swallow, 7; blue jay, 85; Am. crow, 58; fish crow, 1; Carolina chickadee, 68; tufted titmouse, 21; brown-headed nuthatch, 4; house wren, 4; Carolina wren, 36; long-billed marsh wren, 7; short-billed marsh wren, 3; mockingbird, 101; brown thrasher, 55; robin, 9; hermit thrush, 6; eastern bluebird, 34; blue-gray gnatcatcher, 2; golden-crowned kinglet, 16; ruby-crowned kinglet, 51; Am. pipit, 459 (part est.); cedar waxwing, 7; loggerhead shrike, 97; starling, 98; white-eyed vireo, 2; blue-headed vireo, 1; orange-crowned warbler, 12; myrtle warbler, 214; pine warbler, 7; palm warbler, 4; yellow-throat, 5; English sparrow, 30; eastern meadowlark, 123; red-wing, 840 (part est.); rusty blackbird, 15; Brewer's blackbird, 13; bronzed grackle, 63; cowbird, 10; cardinal, 247; rose-breasted grosbeak, 1 (G. H. L.); purple finch, 1; Am. goldfinch, 56; eastern towhee, 38; Savannah sparrow, 106; grasshopper sparrow, 2; Le Conte's sparrow, 2; Henslow's sparrow, 1; vesper sparrow, 12; pine-woods sparrow, 3; slate-colored junco, 12; chipping sparrow, 22; field sparrow, 72; white-throated sparrow, 362; fox sparrow, 1; swamp sparrow, 76; song sparrow, 5. **Total,** 99 species; approximately 13,337 individuals. — Jas. Hy. Bruns, F. J. Buchmann, Earle R. Greene, Joseph E. King, R. W. Krebs, Dr. and Mrs. R. M Lockwood, George H. Lowery, Jr., R. B. Moore, Herbert Stern (members Louisiana Ornithological Society).

252. Des Lacs National Wildlife Refuge, Kenmare, N. Dak. (Kenmare, 2 miles along west shore of Des Lacs Lake north of Kenmare, Tasker's Coulee area 2 miles south and ½ mile west of Kenmare, adjacent prairie; open fields 50%, wooded lake shore road and coulees 50%). — Dec. 21; 9 a.m. to 5 p.m. Clear and calm; temp. 12° to 16°; ground covered by several inches of crusted snow. Observers together. Total hours, 7 (3 on foot, 4 by car); total party-miles 63 (8 on foot, 55 by car). Sharp-tailed grouse, 6; European partridge, 13; ring-necked pheasant, 20; horned owl, 2; snowy owl, 2; downy woodpecker, 2; horned lark, 1; Am. magpie, 13; black-capped chickadee, 24; Bohemian waxwing, 50; northern shrike, 1; starling, 8; English sparrow, 500 (est.). **Total,** 13 species; about 642 individuals. — F. A. Carpenter, Dr. and Mrs. R. T. Gammell.

253. Lower Souris National Wildlife Refuge Upham, McHenry County, N. Dak. (refuge headquarters east across marsh to river bottom near Hillman and Johnson bridges; same as previous years except could not return through sandhills on west side; marsh 33%, meadows 33%, wooded river bottom 33%). — Dec. 26; 9 a.m. to 5 p.m. Clear; temp. 12° to 35°; wind NW, about 15 m.p.h.; snow averaging 12 in. deep. Observers together. Total hours, 8; total miles, 36 (6 on foot, 30 by car). Mallard, 1000 (est. — including 1 albino); black duck, 1; pintail, 2; shoveller, 1; golden eagle, 8; sharp-tailed grouse, 103; ring-necked pheasant, 24; horned owl, 1; hairy woodpecker, 4; downy woodpecker, 1; horned lark, 2; Am. magpie, 2; black-capped chickadee, 8; white-breasted nuthatch, 3; Bohemian waxwing, 18; English sparrow, 23; rusty blackbird, 3 (specimens); snow bunting, 195. **Total,** 18 species; approximately 1399 individuals. — C. J. Henry, Lowell Harrison, Merrill Hammond, Edward Wellein.

254. Crete, Nebr. (along Big Blue River south to Wilber, Doane College Campus; river maple floodplain forest 90%, floodplain marsh 7%, open fields 2%, residential area 1%). — Dec. 31; dawn to dusk. Fair to cloudy; wind S to SE, 10 m.p.h.; temp. 21° to 40°; 75% of river frozen. Three observers together 4½ hours; 2 together 4 hours. Total hours, 8½ (on foot); total miles, 14 (on foot). Cooper's hawk, 1; prairie falcon, 1; sparrow hawk, 1; flicker [sp.], 8; red-bellied woodpecker, 4; hairy woodpecker, 7; downy woodpecker, 3; blue jay, 2; Am. crow, 42; black-capped chickadee, 49; white-breasted nuthatch, 2; brown thrasher, 1; robin, 2; golden-crowned kinglet, 5; starling, 80; English sparrow, 50; cardinal, 3; junco [sp.], 18; tree sparrow, 4. **Total,** 19 species; 283 individuals. — K. A. Browne, J. L. C. Rapp, W. F. Rapp, Jr.

255. Fremont, Nebr. (cemetery, Wild Court Park, Izaak Walton Park, open fields, country roads; deciduous and conifer woods 85%, open fields 10%, roads 5%). — Dec. 27; 8 a.m. to 3 p.m. Clear; temp. 30° to 56°; wind S, light; ground frozen at first, light patches of snow and ice, melting later. Total hours, 8 (on foot and car); total miles, 15. Marsh hawk, 1; bob-white, 3; screech owl, 1; flicker [sp.], 4; red-bellied woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 5; blue jay, 4; Am. crow, 60; black-capped chickadee, 12; white-breasted nuthatch, 5; brown creeper, 1; robin, 50; eastern bluebird, 3; cedar waxwing, 3; starling, 20; English sparrow, 110; western meadowlark, 1; cardinal, 5; pine siskin, 2; Am. goldfinch, 5; slate-colored junco, 55; tree sparrow, 25; Harris's sparrow, 1. **Total,** 24 species; 378 individuals. (Birds scarce in this region.) — Mrs. Lily Ruegg Button.

256. Grand Island, Nebr. (center of town to point 3 miles south, Platte Deutsche Sandpit, cemetery, Wood River; deciduous area 25%, pine and deciduous area 45%, deciduous woodlands 30%). — Dec. 20; 9 to 12 a.m., 1 to 5 p.m. Fair; temp. 35° to 45° F., wind NW, 0-1 m.p.h. in a.m. 1-7 m.p.h. in p.m.; ground spotted with snow; all fresh water frozen. Observers together. Total hours, 7 (on foot); total miles, 4 (on foot). Sparrow hawk, 1; ring-necked pheasant, 2; yellow-shafted flicker, 4; red-shafted flicker, 1; hairy woodpecker, 1; downy woodpecker, 3; Am. crow, 5; black-capped chickadee, 11; white-breasted nuthatch, 2; red-breasted nuthatch, 1; brown creeper, 3; golden-crowned kinglet, 8; Bohemian waxwing, 10; cedar waxwing, 4; starling, 21; English sparrow, 50; bronzed grackle, 10; cardinal, 3; Am. goldfinch, 20; red crossbill, 4; slate-colored junco, 40; tree sparrow, 2. **Total,** 22 species; 206 individuals. — Ethel M. Houser, Verneil E. Griffin.

257. Hastings, Nebr. (radius of [7½?] miles of post office; Crystal Lake wooded area along the Blue River 50%, Parkview Cemetery and adjacent creek bed 30%, open fields, hedgerows and open country 20%). — Dec. 27; 9:15 a.m. to 5 p.m. Clear, temp. 40° to 55°; wind 1-3 m.p.h.; ground frozen up to noon, snow and ice in patches, some open water. Ten observers in 4 parties. Total miles, 59 (12 on foot, 47 in cars). Mallard, 2; red-tailed hawk, 1; marsh hawk, 4; bob-white, 18; ring-necked pheasant, 5; horned owl, 2; belted kingfisher, 1; yellow-shafted flicker, 1; red-shafted flicker, 2; hairy woodpecker, 10; downy woodpecker, 6; horned lark, 15; Am. crow, 10; black-capped chickadee, 25; brown creeper, 10; bluebird, 2; golden-crowned kinglet, 2; starling, 36; English sparrow, 40; meadowlark (sp.), 1; bronzed grackle, 1; cardinal, 7; pine siskin, 10; Am. goldfinch, 6; slate-colored junco, 12; Oregon junco, 2; tree sparrow, 40; Harris's sparrow, 10; song sparrow, 8. **Total,** 29 species; 289 individuals. — W. E. Eigsti, Mrs. A. M. Brooking, Mrs. C. E. Ruch, Mrs. E R Maunder, Miss Vera Maunder, Wm. Jaques, Jack Osborne, David Eigsti, Marvin Rants, Mrs. Jennie Woodworth (Brooking Bird Club).

258. Kearney, Nebr. (territory northwest of town, both sides of Platte river west to Odessa, both sides of Platte River east to Newark, Black's woods, Cottonmill Lake, Kilgore Island; open farmland 40%, open prairie 30%, deciduous woodland 25%, evergreen woodland 5%). — Dec. 26; 8 a.m. to 5 p.m. Clear; temp. 25° to 54° to 30°; wind E, 7 m.p.h.; ground icy in patches, melting; ponds and lakes frozen, river open. Observers together. Total hours, 9 (5 on foot, 4 in car); total miles, 65 (8 on foot, 57 in car). Canada goose, 150; mallard, 196; Am. rough-legged hawk, 3; marsh hawk, 7; prairie falcon, 3; sparrow hawk, 5; ring-necked pheasant, 17; ring-billed gull, 150; mourning dove, 1; belted kingfisher, 1; yellow-shafted flicker, 1; red-shafted flicker, 5; hairy woodpecker, 2; downy woodpecker, 9; horned lark, 31; Am. crow, 613; black-capped chickadee, 19; brown creeper, 3; robin, 140; golden-crowned kinglet, 2; northern shrike, 3; starling, 87; English sparrow, 60; western meadowlark, 3; red-wing, 15; cowbird, 65; pine siskin, 10; Am. goldfinch, 147; slate-colored junco, 29; tree sparrow, 220. **Total,** 30 species; about 1997 individuals. — Joseph C. Hill, Warren E. Paine.

259. Lincoln, Nebr. (from junction of Highways Nos. 6 and 2, northwest of Lincoln to first country schoolhouse; then 1 mile south and ½ mile east to "Nine-mile Prairie;" then to oak grove north side Highway No. 2, ½ mile west of Immanuel Lutheran Cemetery and church; thence to mixed pine-cedar plantation on abandoned farmstead north of highway on return to Lincoln; from there to cattail-slough grass marsh across road west of Oak Creek Park Lake; then to hilltop, 2 miles north of Highway No. 6 on North 14th Street, and return to starting point; country roadsides 18%, native prairie 10%, brushy thickets and woody ravines 30%, cattail-slough grass marsh 5%, oak woods 20%, open farmland 7%, mixed pine-cedar planting 3%, weedy thickets 7%). — Dec. 18; 8:20 a.m. to 5:20 p.m. Partly cloudy at start, clearing with sun shining from 9:30 a.m. to dusk; wind E, 7-10 m.p.h.; temp. 25° to 34° F.; trace of snow thawing. Observers together. Total hours, 8¼ (6¾ on foot, 1½ in car); total miles, 37¾ (6¾ on foot, 31 in car). Cooper's hawk, 1; Am. rough-legged hawk, 1; marsh hawk, 9; bob-white, 3; ring-necked pheasant, 3 (1 ♂, 2 ♀); horned owl, 1; yellow-shafted flicker, 6; red-bellied woodpecker, 1; horned lark, 7; Am. crow, 54; black-capped chickadee, 28; northern shrike, 1; starling, 175; English sparrow, 4; Brewer's blackbird, 1; cardinal, 8; Am. goldfinch, 1; junco [sp.], 10; tree sparrow, 60; Harris's sparrow, 15; song sparrow, 1; Lapland longspur, 28. **Total,** 22 species; 418 individuals. — Edson Fichter, Adrian C. Fox.

260. Lincoln, Nebr. (intersection Cotner Blvd. and Adams Street road, east 3 miles to Stevens' Creek bridge; north along Stevens' Creek on Kinny farm to Rock Island railroad bridge and return to road bridge; thence to Copple farm south of Holdrege Street road; then to Havelock Fairview Cemetery on Adams Street road and adjacent field shelterbelt; then to starting point on Cotner Blvd.; grassy roadsides bordered by native shrubs and trees and farmstead windbreaks 15%, mixed deciduous woodland – 10% grazed – 73%, stream 5%, coniferous plantings–cemetery 2%, mixed deciduous-coniferous field shelterbelt 5%). – Dec. 21; 9:30 a.m. to 5 p.m. Cloudy, sky clearing for an hour at noon and again in mid-afternoon; temp. 29° to 41° F.; wind SE, 7-13 m.p.h.; ground and traces of snow thawing; Stevens' Creek mostly frozen. One observer afoot until 2:30 p.m., 3 together thereafter. Total hours, 7½ (6½ on foot, 1 in car); total miles, 17 (7 on foot, 10 in car). Marsh hawk, 2; sparrow hawk, 1; yellow-shafted flicker, 5; red-shafted flicker, 2; red-bellied woodpecker, 1; hairy woodpecker, 4; downy woodpecker, 7; blue jay, 2; Am. crow, 9; black-capped chickadee, 37; tufted titmouse, 6; white-breasted nuthatch, 2; brown creeper, 12; golden-crowned kinglet, 4; starling, 109; English sparrow, 60; cardinal, 13; junco [sp.], 67; tree sparrow, 24; Harris's sparrow, 2; fox sparrow, 1. **Total,** 21 species; 370 individuals. – Adrian C. Fox, Mrs. Dwight P. Thomas, Mrs. Loren Mills (University Place Bird Club).

261. Nebraska National Forest, Bessey Division, (Thomas Co.), Nebr. (pine woodland 70%, meadow 20%, brush 10%). – Dec. 25; 9 a.m. to 3:30 p.m. Cloudy; temp. 27° to 37°; wind 8-12 m.p.h.; 2-4 inches snow on ground. Total hours, 7½; total miles, 8 (on foot). Am. merganser, 1; Am. rough-legged hawk, 1; hairy woodpecker, 1; Am. magpie, 4; Am. crow, 28; black-capped chickadee, 6; red-breasted nuthatch, 5; Townsend's solitaire, 1; golden-crowned kinglet, 4; Am. goldfinch, 24; junco [sp.], 28; tree sparrow, 42. **Total,** 12 species; 145 individuals. – Carl E. Smith.

262. Omaha, Nebr. (Elmwood Park, Forest Lawn Cemetery, Carter Lake, Irvington, Fontenelle Forest, and suburban areas; deciduous woods 75%, coniferous tree plantings 15%, open fields 10%). – Dec. 21; 9 a.m. to 5 p.m. Cloudy in a.m., cleared by p.m.; temp. 32° to 42°; wind SE, 10-12 m.p.h.; ground bare and dry; little open water. Total hours, 8½ (on foot and by car); total miles, 25. Mallard, 2; sparrow hawk, 1; horned owl, 1; flicker [sp.], 5; red-bellied woodpecker, 2; hairy woodpecker, 2; downy woodpecker, 2; blue jay, 2; Am. crow, 254; black-capped chickadee, 28; tufted titmouse, 2; white-breasted nuthatch, 4; brown creeper, 1; winter wren, 1; golden-crowned kinglet, 2; starling, 156; English sparrow, 178; cardinal, 6; pine siskin, 2; Am. goldfinch, 8; slate-colored junco, 41; tree sparrow, 32; Harris's sparrow, 1; song sparrow, 7. **Total,** 24 species; 740 individuals. – Dr. and Mrs. R. A. Moser, William Ferguson.

263. Scottsbluff, Nebr. (½-mile wide strip from west edge of town to 2 miles west; Carter Canyon Hills southwest of Gering; pasture 20%, mature deciduous woodland 30%, hills covered with grass and evergreens 50%). – Dec. 26; 8 a.m. to 4 p.m. Overcast; temp. 40° to 54° F.; wind W, 8-12 m.p.h.; north side of hills and canyons covered with 2-4 inches of snow; water open. Observers together. Total hours, 7 (on foot); total miles, 5. Mallard, 1; marsh hawk, 4; ring-necked pheasant, 1; killdeer, 2; red-shafted flicker, 1; hairy woodpecker, 1; Am. magpie, 12; black-capped chickadee, 14; northern shrike, 2; English sparrow, 10; western meadowlark, 1; pine siskin, 50; Am. goldfinch, 20; slate-colored junco, 25; Oregon junco (pink-sided race), 12; tree sparrow, 75. **Total,** 16 species; 231 individuals. – Mary Ann Wake, Mrs. Carl Franzen, Mrs. Roy J. Witschy.

264. Baldwin, Kans. (east and north edges of town to point 13 miles northwest, Lone Star Lake; open farmland 10%, town suburbs 20%, deciduous farm woodlots 35%, lake shore 35%). – Dec. 26. Clear; temp. 34° to 48°; wind NW, 2-5 m.p.h.; thin ice on shallow parts of Lone Star Lake. Total hours, 8½; total miles 42 (6 on foot, 36 by car). Mallard, 33; lesser scaup duck, 1; Am. merganser, 1; sharp-shinned hawk, 1; red-tailed hawk, 20; Am. rough-legged hawk, 2; marsh hawk, 9; sparrow hawk, 4; mourning dove, 23; horned owl, 3; barred owl, 2; belted kingfisher, 1; yellow-shafted flicker, 16; red-bellied woodpecker, 12; red-headed woodpecker, 3; yellow-bellied sapsucker, 1; hairy woodpecker, 6; downy woodpecker, 20; horned lark, 100; blue jay, 19; Am. crow, 54; black-capped chickadee, 48; tufted titmouse, 25; white-breasted nuthatch, 1; brown creeper, 4; winter wren, 1; Carolina wren, 4; mockingbird, 2; brown thrasher, 1 (I. L. B.); robin, 52; eastern bluebird, 22; ruby-crowned kinglet, 1 (T. A. E.); migrant shrike, 3; starling, 400; myrtle warbler, 1; English sparrow, 200; meadowlark [sp.], 19; cardinal, 59; purple finch, 2; pine siskin, 5; Am. goldfinch, 20; spotted towhee, 1; slate-colored junco, 150; tree sparrow, 236; Harris's sparrow, 4; white-crowned sparrow, 2 (I. L. B., T. A. E.); song sparrow, 21; Lapland longspur, 35. **Total,** 48 species; 1650 individuals. (Seen in area earlier in week: cedar waxwing, 25; bob-white, 10; Bewick's wren, 1.) – Clara Beach, Amelia Betts, Mrs. Geo. Boicourt, Mr. and Mrs. Ivan L. Boyd, Arthur Bridwell, Mr. ind Mrs. T. A. Evans, Katherine Kelley, R. F. Miller.

265. Clearwater, Kans. (Lake Afton, woods along Ninnescah River, Arkansas River, Clearwater Creek, various ponds and fields; lake, ponds, and rivers 10%, deciduous woodlots 50%, marshland 3%, brushland 20%, open and weed fields 17%). – Dec. 23; dawn to dusk. Completely overcast all day;

temp. 30° to 31°; wind NW, 18-24 m.p.h. diminishing in p.m.; all water open. Observers together. Total hours, 11 (8 on foot, 3 by car); total miles, 73 (9 on foot, 64 by car). Mallard, 31; black duck, 1; unidentified ducks, 40 (seen flying before daylight); Am. merganser, 2; red-tailed hawk, 2; marsh hawk, 5; sparrow hawk, 1; Am. coot, 1; mourning dove, 1; belted kingfisher, 3; flicker [sp.], 1; red-bellied woodpecker, 3; hairy woodpecker, 4; downy woodpecker, 29; horned lark, 5; Am. crow, 2100 (est.); chickadee [sp.], 121; tufted titmouse, 2; brown creeper, 2; robin, 2; eastern bluebird, 3; golden-crowned kinglet, 1; loggerhead shrike, 1; starling, 18; English sparrow, 31; meadowlark [sp.], 117; Brewer's blackbird, 512 (est.); cardinal, 31; spotted towhee, 2; junco [sp.], 48; tree sparrow, 164; Harris's sparrow, 126; song sparrow, 56. **Total,** 32 species; approximately 3466 individuals. — Loren Keller, Harry L. Hobson.

266. Topeka, Kans. (Lake Shawnee area, west along southern border White Lakes Country Club to crossroads southwest Burnett's Mound, north to Highway 10; west 4 miles to pasture land and return; Washburn University Campus, south to Shunganunga Creek following stream to Burnett's Mound and return; lake shore 30%, open farmland 50%, deciduous farm woodlots 15%, grassland 4%, evergreen trees 1%). — Dec. 28; 8:30 a.m. to dusk. Fair; temp. 30° to 52°; wind SSE 1-7 mp.h.; ground bare; water open except small ponds. Eight observers in 3 parties. Total hours, 44 (7 on foot, 37 by car); total miles, 76 (64 by car, 12 on foot). Pied-billed grebe, 1; mallard, 500 (est.); black duck, 4; baldpate, 3; pintail, 2; lesser scaup duck, 3; hooded merganser, 7; Am. merganser, 32; turkey vulture, 1; red-tailed hawk, 6; Am. rough-legged hawk, 3; marsh hawk, 7; sparrow hawk, 9; bobwhite, 32; Am. coot, 5; herring gull, 5; mourning dove, 25; horned owl, 2; flicker [sp.], 7; red-bellied woodpecker, 8; hairy woodpecker, 4; downy wood pecker, 3; horned lark, 1; blue jay, 7; Am. crow, 13; black-capped chickadee, 74; tufted titmouse, 9; red-breasted nuthatch, 1; brown creeper, 2; Carolina wren, 2; robin, 28; eastern bluebird, 6; golden-crowned kinglet, 1; loggerhead shrike, 1; starling, 51; English sparrow, 46; meadowlark [sp.], 12; Brewer's blackbird, 3; cardinal, 51; Am. goldfinch, 8; spotted towhee, 3; slate-colored junco, 71; tree sparrow, 29; field sparrow, 29; Harris's sparrow, 23; song sparrow, 13. **Total,** 46 species; 1126 individuals. (Seen in area Dec. 20: redhead, 1; greater scaup duck, 1; ruddy duck, 2; screech owl, 1.) — Grace Holcombe, Roberta Foote, Evelyn Foote, L. P. Dittemore, Phil Menninger, Clyde R. Morris, Dale Morris, L. B. Carson.

267. Wichita, Kans. (Santa Fe and Crestview Lakes, woods along Whitewater River and Whitewater Creek, Maple Grove Cemetery, Oak and Sims Park, Big Slough; lake 10%, deciduous woodlots 65%, slough and marshland 10%, brushland 10%, open fields 5%). — Dec. 20; dawn to dusk. Clear, becoming partly cloudy in p.m.; temp. 28° to 31°; wind NNW, 8-12 m.p.h.; river and creek open, lakes partially frozen. Total hours, 11 (9 on foot, 2 by car); total miles, 81 (14 on foot, 67 by car). Canada goose, 22; mallard, 3100 (est.); red-tailed hawk, 5; Am. rough-legged hawk, 1; marsh hawk, 8; sparrow hawk, 4; Am. coot, 2; horned owl, 2; barred owl, 1; yellow-shafted flicker, 11; red-shafted flicker, 5; red-bellied woodpecker, 7; hairy woodpecker, 3; downy woodpecker, 24; blue jay, 2; Am. crow, 400 (est.); chickadee [sp.], 113; tufted titmouse, 27; red-breasted nuthatch, 1; brown creeper, 2; Carolina wren, 4; golden-crowned kinglet, 26; cedar waxwing, 3; loggerhead shrike, 2; starling, 87; English sparrow, 217; meadowlark [sp.], 10; Brewer's blackbird, 2; blackbird (sp.), 14; bronzed grackle, 14; cowbird, 1; cardinal, 32; Am. goldfinch, 5; spotted towhee, 4; slate-colored junco, 42; tree sparrow, 51; Harris's sparrow, 41; song sparrow, 4; Lapland longspur, 18. **Total,** 38 species; about 4317 individuals. The cowbird and the grackles were easily identified with 8X glasses at less than 50 feet. (Seen in area Dec. 21: Townsend's solitaire, 1.) — Loren Keller, Harry L. Hobson.

268. Norman, Okla. (area immediately surrounding town to a point 3 miles south, then along eastern fringes to an area 2 miles northeast; thence from northern outskirts to area along South Canadian River west of town; elm-ash-cottonwood-forested river bottom 20%, uncultivated, grassy flood plain 15%, cultivated mixed grass prairie 10%, uncultivated mixed grass prairie 30%, elm-hackberry woodland on stream borders in mixed grass prairie 10%, town and suburbs 14%, water 1%). — Dec. 28; 10 a.m. to 6 p.m. Clear; temp. 60° to 75°; no wind; ground dry and bare; water open. Total hours, 8 (on foot); total miles 11. Red-tailed hawk, 4; marsh hawk, 4; sparrow hawk, 1; Am. coot, 1; mourning dove, 12; horned owl, 2; belted kingfisher, 2; yellow-shafted flicker, 13; red-shafted flicker, 3; flicker (unident.), 11; red-bellied woodpecker, 3; red-headed woodpecker, 5; yellow-bellied sapsucker, 3; hairy woodpecker, 1; downy woodpecker, 13; horned lark, 9; blue jay, 1; Am. crow, 21; Carolina chickadee, 17; tufted titmouse, 2; brown creeper, 2; Bewick's wren, 2; Carolina wren, 2; mockingbird, 4; robin, 110; eastern bluebird, 14; cedar waxwing, 37; loggerhead shrike, 1; starling, 16; English sparrow, 300 (est.); meadowlark (sp.), 75; western meadowlark, 35; red-wing, 100; cowbird, 200; cardinal, 4; goldfinch [sp.], 73; spotted towhee, 2; Savannah sparrow, 1; slate-colored junco, 80; tree sparrow, 1; field sparrow, 4; white-crowned sparrow, 6; fox sparrow, 2; song sparrow, 6. **Total,** 43 species; 1205 individuals. — Harold A. Dundee.

269. Oklahoma City, Okla. (in vicinity of Lake Overholser starting at 39th Street Bridge and working around lake; cattail marsh and lake shore 75%,

deciduous woods and river bank 25%. — Dec. 26; dawn to dusk. Clear; temp. 37° to 60°; wind, 1 m.p.h. Four observers together. Total miles, 33 (26 by car, 7 on foot); total hours, 10½ (1½ by car, 9 on foot). Mallard, 7000 (est.); canvas-back, 10; Am. merganser, 200 (est.); red-tailed hawk, 1; Am. rough-legged hawk, 4; marsh hawk, 6; sparrow hawk, 1; Am. coot, 8; killdeer, 17; herring gull, 3; ring-billed gull, 240 (est.); mourning dove, 1; barred owl, 1; belted kingfisher, 2; red-shafted flicker, 16; red-bellied woodpecker, 3; red-headed woodpecker, 11; yellow-bellied sapsucker, 1; hairy woodpecker, 8; downy woodpecker, 8; blue jay, 8; Am. crow, 91; black-capped [probably Carolina — Ed.] chickadee, 68; tufted titmouse, 14; brown creeper, 1; Bewick's wren, 3; Carolina wren, 6; robin, 2; eastern bluebird, 8; ruby-crowned kinglet, 1; starling, 1; myrtle warbler, 3; goldfinch [sp.], 77; English sparrow, 29; meadowlark [sp.], 75; red-wing, 200 (est.); cardinal, 29; spotted towhee, 10; Savannah sparrow, 7; slate-colored junco, 100; tree sparrow, 6; Harris's sparrow, 123; white-throated sparrow, 4; song sparrow, 2. **Total,** 44 species; approximately 8409 individuals. Lake exceedingly low, no water having flowed down North Canadian River since early summer. In addition, most farm ponds with little or no water. This condition probably accounts for mallard concentration on lake. — Franklin Peek, Bob Jenkins, Harry Turner, Dan A. Gardner.

270. Salt Plains National Wildlife Refuge, Jet, Okla. (and vicinity, same area as in previous years, consisting of 10,600-acre lake and small ponds 40%, adjacent agricultural land 20%, pasture 10%, deciduous woods 30%). — Dec. 21; dawn to dusk. Dense fog until noon; p.m. partly cloudy; wind N, 15 m.p.h.; temp. 30° to 40°; lake and ponds open but previously frozen. Fifteen observers in 3 parties. Total hours, 27 (15 on foot, 12 by car); total miles, 140 (20 on foot, 120 by car). Common loon, 1; double-crested cormorant, 1; great blue heron, 57; Canada goose, 750; mallard, 1300 (est.); black duck, 6; gadwall, 3; baldpate, 36; pintail, 30; green-winged teal, 168; shoveller, 35; ring-necked duck, 2; canvas-back, 1; lesser scaup duck, 25; Am. golden-eye, 37; buffle-head, 9; ruddy duck, 3; hooded merganser, 21; Am. merganser, 1000 (est.); sharp-shinned hawk, 2; Cooper's hawk, 1; red-tailed hawk, 10; Harlan's hawk, 1; Am. rough-legged hawk, 3; golden and bald eagles, 32; marsh hawk, 26; sparrow hawk, 4; bob-white, 2; ring-necked pheasant, 4; killdeer, 8; Wilson's snipe, 5; greater yellow-legs, 12; herring gull, 12; ring-billed gull, 800 (est.); mourning dove, 23; screech owl, 1; horned owl, 5; belted kingfisher, 5; yellow-shafted flicker, 32; red-shafted flicker, 7; red-bellied woodpecker, 15; hairy woodpecker, 4; downy woodpecker, 16; horned lark, 62; Am. crow, 239; chickadee (sp.), 57; tufted titmouse, 16; brown creeper, 4; winter wren, 1 (S. H. L., J. E. G.); Bewick's wren, 16; Carolina wren, 4; long-billed marsh wren, 2; robin, 76; eastern bluebird, 72; golden-crowned kinglet, 9; cedar waxwing, 3; loggerhead shrike, 3; starling, 87; English sparrow, 32; eastern and western meadowlarks, 173; red-wing, 306; rusty blackbird, 57; cowbird, 19; cardinal, 28; pine siskin, 30; Am. goldfinch, 40; spotted towhee, 19; Savannah sparrow, 1; Leconte's sparrow, 2 (A. F., J. E. G., M. G., F. H., S. H. L.); vesper sparrow, 4 (W. W. T.); slate-colored junco, 30; tree sparrow, 500 (est.); field sparrow, 6; Harris's sparrow, 600 (est.); white-crowned sparrow, 12; fox sparrow, 2; swamp sparrow, 1; song sparrow, 114. **Total,** 80 species; approximately 7142 individuals. — Hugh and Zelta Davis, James J. DeVaney, Bill T. Evans, Addie Fromholz, John E. and Margret Galley, Florel Helema, Bob Jenkins, Tom Jesse, Orrin W. Letson, Seth H. Low, Paul F. Nighswonger, Jimmy Norman, Wilford W. Tullis.

271. Tulsa, Okla. (Mohawk Park—same area in part as covered by previous bird counts; city reservoirs, recreation lake, and lagoon 20%; hackberry, elm, oak, flood-plains, 40%, areas devoted to park use 20%, cultivated fields and hay meadows 20%). — Dec. 28; 8 a.m. to 5 p.m. Clear; temp. 30° to 72°; wind S, 8-10 m.p.h. Thirty observers in 7 parties; total hours, 53 (50 on foot, 3 in car); total miles, 48 (33 on foot, 15 by car). Pied-billed grebe, 2; white pelican, 10 (flock seen in same area at later date; wounded bird captured Jan. 6 — M. J.); double-crested cormorant, 1; great blue heron, 8; mallard, 1885 (est.); gadwall, 4; pintail, 9; green-winged teal, 16; baldpate, 4; shoveller, 75; redhead, 2; ring-necked duck, 6; lesser scaup duck, 1; Am. golden-eye, 14; buffle-head, 1; hooded merganser, 2; Am. merganser, 1200; red-breasted merganser, 1; Cooper's hawk, 3; red-tailed hawk, 14; red-shouldered hawk, 9; Am. rough-legged hawk, 1; golden eagle, 1 (H. S. D.); marsh hawk, 8; sparrow hawk, 2; bob-white, 24; sora, 1; Am. coot, 1; killdeer, 27; Wilson's snipe, 29; herring gull, 2; ring-billed gull, 300 (est.); horned owl, 5; barred owl, 6; short-eared owl, 1; belted kingfisher, 5; yellow-shafted flicker, 97; red-shafted flicker, 1; pileated woodpecker, 3; red-bellied woodpecker, 19; red-headed woodpecker, 379; yellow-bellied sapsucker, 3; hairy woodpecker, 11; downy woodpecker, 54; blue jay, 164; Am. crow, 93; chickadee [sp.], 179; tufted titmouse, 226; white-breasted nuthatch, 13; brown creeper, 3; Carolina wren, 31; mockingbird, 9; brown thrasher, 2; robin, 618; hermit thrush, 1 (O. W. L.); olive-backed thrush, 3 (H. S. D., G. E. T.) [no details; very doubtful — Ed.]; eastern bluebird, 92; golden-crowned kinglet, 7; ruby-crowned kinglet, 14; cedar waxwing, 3; loggerhead shrike, 5; starling, 269; myrtle warbler, 7; English sparrow, 60; meadowlark [sp.], 179; red-wing, 47; rusty blackbird, 940; Brewer's blackbird, 65; bronzed grackle, 28; cowbird, 37; cardinal, 154 Am. goldfinch, 106; eastern towhee, 2; spotted towhee, 7; Savannah sparrow, 4; Le Conte's sparrow, 4 [no details — Ed.]; vesper sparrow, 1; slate-colored junco, 244; tree sparrow, 110; chipping sparrow, 3; field sparrow, 25; Harris's sparrow, 98;

white-crowned sparrow, 26; white-throated sparrow, 190; fox sparrow, 40; Lincoln's sparrow, 33; swamp sparrow, 3; song sparrow, 96. **Total,** 88 species; approximately 8488 individuals. (Observed Dec. 27: barn owl, 1; pine siskin, 1.) — Ralph M. Brown, Jimmy Caldwell, Hugh S. Davis, Ernest J. and Lena R. Esst, Edith Force, John and Margret Galley, Maurine Jarrell, Mr. and Mrs. Tom Jessee, Mary Jo Hyatt, Mary Kinkead, Harold Laughlin, Orrin and Ethel Letson, Louis Leistner, Carol Mason, Harvey T. Phillips, Boyd and Minta Robinson, Bruce and Ann Reynolds, Bess Smith, Stanley Smith, G. E. Tenney and Dick Tenney, Thelma Vickery, Louise Young, Donald Kiess.

272. El Paso, Tex. (Mesilla National Wildlife Refuge, Randel's Pool, McKelligon's Canyon, Memorial Park, Ascarate Park, Rio Grande levee and valley; river bosque 23%, semi-arid canyon 8%, desert sandhills 15%, city park 8%, artificial lake 23%, river levee and irrigated farms 15%, dairy pens 8%). — Dec. 27; 8:30 a.m. to 4:30 p.m. Clear; temp. 33° to 62°; wind NE to ENE, 3-1 m.p.h.; ground bare; water open. Three observers in 2 parties. Total hours, 11½ (9½ on foot, 2 by car); total miles, 88 (17 on foot, 71 by car). Pied-billed grebe, 4; great blue heron, 4; mallard, 30; gadwall, 150; pintail, 15; green-winged teal, 37; canvas-back, 7; sharp-shinned hawk, 1; red-tailed hawk, 1; Swainson's hawk, 2; marsh hawk, 6; sparrow hawk, 6; Gambel's quail, 22; Am. coot, 70; killdeer, 5; ring-billed gull, 1; mourning dove, 2; horned owl, 4; belted kingfisher, 1; red-shafted flicker, 29; Say's phoebe, 1; Steller's jay, 5 [no details — Ed.]; California jay, 3; white-necked raven, 1; mountain chickadee, 3 [no details—Ed.]; long-billed marsh wren, 2; sage thrasher, 3; robin, 50; Mexican bluebird, 10; mountain bluebird, 2; loggerhead shrike, 11; starling, 40; Audubon's warbler, 5; English sparrow, 23; western meadowlark, 8; yellow-headed blackbird, 60; red-wing, 1050; Brewer's blackbird, 1004; cowbird, 275; pyrrhuloxia, 4; house finch, 115; spotted towhee, 2; desert sparrow, 1; Oregon junco, 4; gray-headed junco, 1; white-crowned sparrow (Gambel's), 151. **Total,** 46 species; 3231 individuals. — Mr. and Mrs. W. W. Wimberly, Mrs. J. Owen Allen (El Paso Bird Study Club).

273. Fort Worth, Tex. (roadsides and pastures adjacent to Clear Fork River south of T & P railroad, east edge of Ridglea Golf Course, Live Oak Creek at its junction with Lake Worth, Fish Hatchery near Eagle Mountain Lake, north end of Lake Worth; deciduous bottom woodland 50%, open pastureland 25%, ponds and lakes 24%, cattail marsh 1%). — Dec. 28; 9:35 a.m. to 6:10 p.m. Clear with few scattered clouds; temp. 45° to 59°; wind 6-8 m.p.h.; ground moderately damp. Four observers in 3 parties. Total hours, 11 (4 in car, 7 on foot); total miles, 65 (57 by car, 8 on foot). Gadwall, 5; pintail, 6; green-winged teal, 6; blue-winged teal, 1; canvas-back, 1; scaup duck, 1; turkey vulture, 27; red-tailed hawk, 2; Am. rough-legged hawk, 2; sparrow hawk, 3; bob-white, 20; Am. coot, 3; killdeer, 9; Wilson's snipe, 13; least sandpiper, 16; western sandpiper, 47; herring gull, 15; mourning dove, 7; belted kingfisher, 3; yellow-shafted flicker, 10; red-shafted flicker, 1; red-bellied woodpecker, 7; yellow-bellied sapsucker, 2; downy woodpecker, 4; eastern phoebe, 1; horned lark, 35; blue jay, 17; Am. crow, 21; Carolina chickadee, 14; tufted titmouse, 10; white-breasted nuthatch, 1; Bewick's wren, 5; Carolina wren, 9; long-billed marsh wren, 1; mockingbird, 13; brown thrasher, 5; robin, 1; bluebird [sp.], 18; ruby-crowned kinglet, 8; Am. pipit, 5; cedar waxwing, 38; loggerhead shrike, 9; starling, 176; myrtle warbler, 3; English sparrow, 61; meadowlark [sp.], 30; red-wing, 30,000 (est.); cowbird, 10,000 (est.); cardinal, 46; goldfinch [sp.], 35; spotted towhee, 9; Savannah sparrow, 30; vesper sparrow, 23; slate-colored junco, 60; field sparrow, 29; Harris's sparrow, 157; white-throated sparrow, 16; fox sparrow, 2; Lincoln's sparrow, 25; song sparrow, 22. **Total,** 60 species; approximately 41,-146 individuals. — Mrs. Robert H. Bowman, Mr. and Mrs. Wade Smith, Doris Smith.

274. Harlingen, Tex. (a circle of 7½-mile radius, with center on a line running from Harlingen to Santa Maria; hackberry woodland 5%, brush 10%, canal banks and levees 35%, open farmlands and orchards 50%). — Dec. 27; 6:30 a.m. to 7 p.m.; fair in a.m., cloudy in p.m.; temp. 42° to 65°; calm. Twenty-one observers in 9 parties. Total hours, 105; total miles, 238 (52 afoot, 186 by car). Eared grebe, 3; least grebe, 46; pied-billed grebe, 23; white pelican, 12; Mexican cormorant, 97; anhinga, 42; great blue heron, 41; Am. egret, 65; snowy egret, 101; Louisiana heron, 38; little blue heron, 26; green heron, 4; black-crowned night heron, 42; yellow-crowned night heron, 2; Am. bittern, 1; least bittern, 1; white-faced glossy ibis, 144; white ibis, 12; Canada goose, 50; white-fronted goose, 2; fulvous tree duck, 26; mallard, 11; mottled duck, 8; gadwall, 139; baldpate, 60; pintail, 15; green-winged teal, 3; blue-winged teal, 7; shoveller, 29; redhead, 2; ring-necked duck, 4; canvas-back, 8; lesser scaup duck, 43; ruddy duck, 16; turkey vulture, 118; black vulture, 73; white-tailed kite, 1; sharp-shinned hawk, 5; Cooper's hawk, 10; red-tailed hawk, 5; Harlan's hawk, 2; red-shouldered hawk, 22; white-tailed hawk, 1; Harris's hawk, 16; marsh hawk, 33; Audubon's caracara, 8; duck hawk, 3; pigeon hawk, 3; sparrow hawk, 89; chachalaca, 10; bob-white, 5; sandhill crane, 11; king rail, 1; sora, 3; Florida gallinule, 30; Am. coot, 355; killdeer, 90; black-bellied plover, 3; Wilson's snipe, 43; long-billed curlew, 16; spotted sandpiper, 6; greater yellow-legs, 30; lesser yellow-legs, 4; Baird's sandpiper, 2; least sandpiper, 344; dowitcher, 277; stilt sandpiper, 6; semipalmated sandpiper, 55; western sandpiper, 11; black-necked stilt, 12; herring gull, 5; ring-billed gull, 14; laughing gull, 2; gull-billed tern, 9; Forster's tern, 1; common tern, 1; red-billed

pigeon, 3; mourning dove, 187; ground dove, 10; Inca dove, 47; white-fronted dove, 16; road-runner, 1; screech owl, 4; horned owl, 4; burrowing owl, 1; Merrill's pauraque, 1; belted kingfisher, 17; Texas kingfisher, 12; yellow-shafted flicker, 1; red-shafted flicker, 1; golden-fronted woodpecker, 63; yellow-bellied sapsucker, 1; ladder-backed woodpecker, 40; West Mexican kingbird (Couche's), 1; derby flycatcher, 81; eastern phoebe, 43; Say's phoebe, 1; Empidonax flycatcher (sp.), 2 (R. B., A. C. B.); yellow-bellied flycatcher, 2 (R. S.); wood pewee, 1; vermilion flycatcher, 18; beardless flycatcher, 1 (L. I. D.); green jay, 63; white-necked raven, 1; black-crested titmouse, 51; verdin, 35; house wren, 46; Bewick's wren (Texas), 29; Carolina wren (Lomita), 32; cactus wren, 1; long-billed marsh wren, 22; mockingbird, 508; Sennett's thrasher, 22; curve-billed thrasher, 55; robin, 5; hermit thrush, 1; bluebird [sp.], 57; blue-gray gnatcatcher, 82; golden-crowned kinglet, 2; ruby-crowned kinglet, 65; Am. pipit, 101; cedar waxwing, 2; loggerhead shrike, 45; white-eyed vireo, 19; solitary vireo, 3; yellow-green vireo, 1 (R. S.); black and white warbler, 12; Tennessee warbler, 2; orange-crowned warbler, 57; Nashville warbler, 10; yellow warbler, 9; myrtle warbler, 158; black-throated gray warbler, 1 (L. C. G.); black-throated green warbler, 6; pine warbler, 1; Kentucky warbler, 1 ("spectacles" and other markings carefully noted — R. S.); black-capped warbler, 1; English sparrow, 212; eastern meadowlark (Rio Grande), 163; red-wing, 9000; Audubon's oriole, 14; hooded oriole, 3; Alta Mira oriole, 1 (yellow wing-bar noted — L. C. G. *et al.*); Brewer's blackbird, 5; boat-tailed grackle (great-tailed), 2400; brown-headed cowbird, 58; bronzed cowbird (red-eyed), 20; cardinal, 177; pyrrhuloxia, 10; Sharpe's seedeater, 75; goldfinch [sp.], 15; Texas sparrow, 56; Savannah sparrow, 42; grasshopper sparrow, 4; Baird's sparrow, 3; vesper sparrow, 2; lark sparrow, 113; Cassin's sparrow, 2; black-throated sparrow, 40; field sparrow, 1; white-crowned sparrow, 4; Lincoln's sparrow, 83; song sparrow, 10. **Total,** 163 species; 17,436 individuals. [According to L. Irby Davis, the yellow-green vireo now nests regularly in census area but has not previously been observed in December. Alta Mira oriole was probably same individual observed by Davis, Dec. 23, 3 miles north, at which time bird was singing. Davis has two previous sight records for area, obtained several years ago. — Ed.]. — C. T. Gill, Mrs. Maurine Gill, Luther C. Goldman, Raymond G. Howard, L. Irby Davis, Mrs. Anna May Davis, Mrs. Ruby Sandmeyer, Robert Drawe, R. Lucile Loban, Josephine Poneleit, Ruth Joan White, Mary Wiley, A. C. Becker, Myra E. Loban, Carrie L. Neidy, Lola Barnhart, Mrs. C. D. Richardson, Arthur H. Richardson, James F. Cole, Robt. W. Cole, Marshall Johnston, Jimmy Reaney, Richard Bentley.

275. Houston, Tex. (lower portion of San Jacinto River from point 15 miles upstream near Sheldon, south on both sides of river to mouth; heavy woods of pine and oak, cypress swamps, open fields, salt-water estuary, river bottom). — Dec. 21; 8 a.m. to 5 p.m. Bright sunshine all day; temp. 55° to 65°; calm. Seventeen observers in 4 parties. Total party-miles, 110 (90 by car, 20 on foot); total party-hours, 30. Pied-billed grebe, 9; white pelican, 335; brown pelican, 20; double-crested cormorant, 10; great blue heron, 23; Am. egret, 62; snowy egret, 2; Louisiana heron, 29; little blue heron, 6; white-faced glossy ibis, 333 (some of these had all the marks of eastern glossy ibis, and probably were the latter species); mallard, 2; black duck, 8; gadwall, 5; pintail, 203; baldpate, 25; canvas-back, 1; redhead, 1; lesser scaup duck, 4; ruddy duck, 30; turkey vulture, 76; black vulture, 141; Cooper's hawk, 3; red-tailed hawk, 45; red-shouldered hawk, 16; Am. rough-legged hawk, 1 (rare but not unprecedented); bald eagle, 1; marsh hawk, 30; sparrow hawk, 48; bob-white, 6; clapper rail, 1; Am. coot, 1025; killdeer, 74; Wilson's snipe, 6; greater yellow-legs, 2; herring gull, 1; ring-billed gull, 16; laughing gull, 30; gull-billed tern, 4; Forster's tern, 25; royal tern, 1; Caspian tern, 2; mourning dove, 26; barred owl, 1; belted kingfisher, 19; flicker [sp.], 8; pileated woodpecker, 3; red-bellied woodpecker, 9; red-headed woodpecker, 2; yellow-bellied sapsucker, 5; downy woodpecker, 3; eastern phoebe, 38; vermilion flycatcher, 2; tree swallow, 53; blue jay, 27; Am. crow, 222; Carolina chickadee, 47; tufted titmouse, 19; white-breasted nuthatch, 1; brown-headed nuthatch, 2; brown creeper, 2; house wren, 7; winter wren, 2; Carolina wren, 21; short-billed marsh wren, 7; mockingbird, 69; catbird, 1; brown thrasher, 5; hermit thrush, 4; eastern bluebird, 45; blue-gray gnatcatcher, 17; golden-crowned kinglet, 45; ruby-crowned kinglet, 95; Am. pipit, 143; loggerhead shrike, 51; starling, 5000 (est.); white-eyed vireo, 1; solitary vireo, 2; orange-crowned warbler, 4; myrtle warbler, 123; pine warbler, 31; yellow-throat, 3; English sparrow, 145; meadowlark [sp.], 204; red-wing, 20,000 (est.); rusty blackbird, 500 (est.); Brewer's blackbird, 1000 (est.); boat-tailed grackle, 9; bronzed grackle, 5000 (est.); cowbird, 75,000 (est.); cardinal, 53; Am. goldfinch, 76; Savannah sparrow, 44; vesper sparrow, 2; slate-colored junco, 2; chipping sparrow, 1; field sparrow, 16; white-throated sparrow, 20; Lincoln's sparrow, 9; swamp sparrow, 22; song sparrow, 1. **Total,** 100 species; 110,911 individuals. —C. E. Buehner, Mabel Cline, Alice Filkins, Mary Gentry, Werner Gottsch, Mr. and Mrs. Charles Hamilton, J. M. Heiser, Jr., Mabel Kaiser, C. Matthews, Edna Miner, Mr. and Mrs. John Rodell, Frank Watson, Carrie Wilcox, George G. Williams, Stephen Williams.

276. Tivoli, Tex. (7 miles north of Tivoli to Green Lake area, Tivoli west to San Antonio River, east to bluff of Hines Bay; pastures 50%, farms 10%, wooded stream banks 10%, cattail marsh and lakes 30%). — Dec. 26; 8 a.m. to 5:30 p.m. Clear;

wind SW, less than 5 m.p.h.; temp. 52°. Total hours, 9½ (6 by car, 3½ by foot); total miles, 50 (45 by car, 5 by foot). White pelican, 1; great blue heron, 3; Am. egret, 15; snowy egret, 15; little blue heron, 1; white-faced glossy ibis, 3; Canada goose (ssp.), 300 (est.); white-fronted goose, 200 (est.); snow goose, 2000 (est.); shoveller, 15; scaup duck [sp.], 1; turkey vulture, 20; Swainson's hawk, 1; marsh hawk, 20; Audubon's caracara, 1; sparrow hawk, 16; sandhill crane, 150; Am. coot, 10; killdeer, 2; mourning dove, 11; horned owl, 1; burrowing owl, 1; poor-will, 2 (?—Ed.); belted kingfisher, 6; vermilion flycatcher, 1; black-crested titmouse, 2; tufted titmouse, 5; mockingbird, 6; loggerhead shrike, 10; starling, 20; meadowlark [sp.], 25; boat-tailed grackle, 200—; red-wing, 200—; cardinal, 12; Baird's sparrow, 5 [? — Ed.]. **Total,** 35 species; about 3281 individuals. — Mrs. O. F. Hartman.

277. Billings, Mont. (Billings to Huntley, along Yellowstone River bottom and adjacent coulees and uplands south of the river and return through farmlands north of the river — same area as in 1946). — Dec. 27; 7:45 a.m. to 3:00 p.m. Partly cloudy; temp. 39° at start, 52° at return; light breeze; ground bare. Four observers in 2 parties. Total party-hours, 9½ (7½ afoot, 2 by car); total party-miles, 55½ (10½ afoot, 45 by car). Mallard 1400 (est.); Am. golden-eye, 21; Am. merganser, 4; Am. rough-legged hawk, 1; golden eagle, 1; bald eagle, 4; marsh hawk, 1; sparrow hawk, 1; sharp-tailed grouse, 1; ring-necked pheasant, 50; killdeer, 2; red-shafted flicker, 8; hairy woodpecker, 2; downy woodpecker, 2; Am. magpie, 92; horned lark, 1; black-capped chickadee, 7; white-breasted nuthatch, 1; brown creeper, 2; long-billed marsh wren, 1; English sparrow, 83; western meadowlark, 11; evening grosbeak, 2; Oregon junco, 2; tree sparrow, 143; song sparrow, 15. **Total,** 26 species; 1858 individuals. (Seen Dec. 28: mourning dove, 1; Lewis's woodpecker, 1; northern shrike, 1.) — Wilfred D. Crabb, John W. Leete, Cecil E. Gubser, Robert N. Randall.

278. Fortine, Mont. (farms, river-flats, and forests in central Fortine valley, same territory as for past 19 years; mature larch-fir-pine forest 30%, second-growth fir-larch-lodgepole woods 35%, river-bottom spruce-aspen woods 25%, fields and open hills 10%). —Dec. 26; 8:30 a.m. to 5:30 p.m. Sun shining through hazy clouds; temp. 27° to 49°; wind S, 2-10 m.p.h.; ground bare in open, up to 8 in. old snow in woods; streams open. Total hours, 9 (on foot); total miles, 18. Mallard, 24; baldpate, 13; green-winged teal, 4; Am. golden-eye, 1; Barrow's golden-eye, 1; hooded merganser, 3; ruffed grouse, 1; Wilson's snipe, 3; horned owl, 2; saw-whet owl, 1; pileated woodpecker, 1; hairy woodpecker, 2; Am. (alpine) three-toed woodpecker, 1; Canada jay, 5; Steller's jay, 1; Am. magpie, 12; raven, 38; Clark's nutcracker, 8; black-capped chickadee, 6; mountain chickadee, 24; white-breasted nuthatch, 10; red-breasted nuthatch, 13; dipper, 1; golden-crowned kinglet, 1; northern shrike, 1; evening grosbeak, 2; pine grosbeak, 8; common redpoll, 15; song sparrow, 1; snow bunting, 32. **Total,** 30 species; 235 individuals. — Winton Weydemeyer.

279. Kemmerer, Wyo. (town and up Hams Fork to reservoir, downstream to Diamondville, up Willow Creek to Susie — approximately same area as in 1945; town streets 15%, creek bottoms 50%, sagebrush hills 35%). — Dec. 28; 8 a.m. to 3:30 p.m. Clear; temp. 12° to 35°; wind variable, 5 m.p.h. to calm; 0-4 inches crusted snow on ground; Hams Fork about half frozen over. Total hours, 7 (on foot); total miles, 10 (on foot); car used for travel between study areas. Am. golden-eye, 7; golden eagle, 2; belted kingfisher, 1; Am. magpie, 35; black-capped chickadee, 2; northern shrike, 1; English sparrow, 46; gray-crowned rosy finch, 100 (est.; about ⅓ typical of the Hepburn's race, fewer typical gray-crowned and the balance intergrades); tree sparrow, 2; song sparrow, 1. **Total,** 11 species (1 additional subspecies); about 197 individuals. — F. W. Haecker.

280. Fort Collins, Colo. (College farm, City Park, Cemetery, and southwest portion of town, Terry Lake, Lindenmeier Lake, Long Pond, Richard Lake, Chase and King Reservoir, Reservoir No. 11, Reservoir No. 6, mouth of Poudre Canyon, mouth of Rist Canyon, Bingham Hill, and marsh west of Cache La Poudre River near Prospect Street; farmland and grassland 35%, irrigation reservoirs 25%, mountain mahogany foothills 10%, city park, cemetery, town — mixed growth 20%, lower mountain canyons — cottonwoods 5%, cattail swamp — cottonwood river bottom 5%). — Dec. 27; 7 a.m. to 5 p.m. Fair to partly cloudy; temp. 25° to 56° F.; wind very light; ground bare; only Lindenmeier Lake, Reservoir No. 11, Reservoir No. 6, a small portion of Terry Lake and the river outside the canyon open. One observer in a.m., 2 observers together in p.m. Total hours, 8½ (5½ on foot, 3 by car); total miles, 61 (7 on foot, 54 by car). Mallard, 8892 (est.); baldpate, 30 (est.); pintail, 96; green-winged teal, 223; shoveller, 4; Am. merganser, 20; ferruginous rough-leg, 1; marsh hawk, 1; ring-necked pheasant, 3; Wilson's snipe, 1; ring-billed gull, 1; belted kingfisher, 1; red-shafted flicker, 13; downy woodpecker, 1; Am. magpie, 39; Am. crow, 9; black-capped chickadee, 2; mountain chickadee, 2; brown creeper, 6; ruby-crowned kinglet, 2 (observed carefully at close range — J. F. C.); English sparrow, 83; western meadowlark, 1; red-wing, 347 (est.); evening grosbeak, 17; house finch, 2; slate-colored junco, 1; Oregon junco, 43 (subspecies: pink-sided, 37; Montana, 4; Shufeldt's (?), 2; subspecific determinations made with individuals of each feeding at 50 feet in direct sunlight in the same field of 8X binoculars — J. F. C.); gray-headed junco, 1; tree sparrow, 4; song sparrow, 4. **Total,**

31 species (2 additional subspecies); approximately 9850 individuals. (During the census one dead bronzed grackle was also observed, hanging by the foot in the top of a 75-foot cottonwood in town.) — Elizabeth G. Cassel, J. Frank Cassel.

281. Lyons, Colo. (area about 10 miles in diameter surrounding Lyons; plains, mostly farmlands, including six small lakes and reservoirs and St. Vrain Creek bottoms 65%, foothills, including open hillsides, ponderosa pine forests, a little farmland, about 4 miles along banks of North and South St. Vrain Rivers, and about 2 miles along a small brook 35%). — Dec. 21; 7 a.m. to 4:30 p.m. Overcast; temp. 25° to 45°; no wind in a.m., 8-38 m.p.h. in p.m.; reservoirs and ponds almost completely frozen; ground bare on plains, and foothills, except for snow on north slopes. Total miles, 72 (66 by car, 6 on foot). Mallard, 114; pintail, 600 (est.); shoveller, 2; ring-necked pheasant, 3; belted kingfisher, 2; red-shafted flicker, 8; woodpecker (sp.), 1 (apparently either golden-fronted or red-bellied; ladder back, red cap, and large size clearly seen with 8X binoculars); Lewis's woodpecker, 3; hairy woodpecker, 1; downy woodpecker, 1; Steller's jay, 23; Am. magpie, 42; piñon jay, 94; Clarke's nutcracker, 8; black-capped chickadee, 4; mountain chickadee, 3; red-breasted nuthatch, 4; brown creeper, 1; dipper, 9; cañon wren, 2; robin, 1; Townsend's solitaire, 1; northern shrike, 1; English sparrow, 4; western meadowlark, 24; red-wing, 1; blackbird (sp.); 75 (est.); house finch, 35; pine siskin, 6; Am. goldfinch, 5; slate-colored junco, 19; Oregon junco, 67 (including pink-sided junco, 60); gray-headed junco, 1; tree sparrow, 3; white-crowned sparrow, 26; song sparrow, 2. **Total,** 35 species (1 additional subspecies); 1196 individuals. — Ronnie Bonnet, Mrs. H. M. Kingery, Hugh Kingery.

282. Sterling, Colo. (within 3-mile radius; irrigated farmlands north and river woodlands east of town; irrigated farmland 40%, mature deciduous woodlands 50%, river bank 10%). — Dec. 26; dawn to dusk. Overcast; temp. 39° to 59° F.; wind NW, 10-15 m.p.h. in early a.m.; few patches of snow on ground. Observers together. Total hours, 10; total miles, 10 (on foot). Mallard, 5; Swainson's hawk, 4 [no details — Ed.]; Am. rough-legged hawk, 1; marsh hawk, 1; duck hawk, 2; sparrow hawk, 1; ring-necked pheasant, 63; Wilson's snipe, 1; belted kingfisher, 3; yellow-shafted flicker, 1; red-shafted flicker, 4; hairy woodpecker, 3; downy woodpecker, 3; horned lark, 36; Am. magpie, 61; black-capped chickadee, 15; brown creeper, 6; starling, 350 (est.); English sparrow, 90 (est.); western meadowlark, 10; red-wing, 820 (est.); house finch, 21; Am. goldfinch, 44 (est.); white-winged junco, 3; slate-colored junco, 7; Oregon junco, 17 (including pink-sided subspecies, 9); unidentified juncos, 80 (est.); tree sparrow, 200 (est.); white-crowned sparrow, 3; song sparrow, 9. **Total,** 29 species (1 additional subspecies); approximately 1864 individuals. — Robert E. Lamb, Richard Halberg.

283. Albuquerque, N. Mex. (Rio Grande Valley and piedmont slope of the Sandias Mts., radially from Alameda Bridge across Rio Grande, eight miles north of the city of Albuquerque). — Dec. 28; 6:45 a.m. to 5:45 p.m. Clear; ground moist, almost windless, temp. 20° to 45°. Two observers along river in a.m.; 2 in foothills and along river in p.m. Total hours, 10; total miles, 68 (60 by car, 8 afoot). Canada goose, 5; mallard, 20; Am. golden-eye, 1; sharp-shinned hawk, 1; Am. rough-legged hawk, 1; golden eagle, 1; marsh hawk, 4; pigeon hawk, 1; sparrow hawk, 4; Gambel's quail, 4; ring-necked pheasant, 2; Am. coot, 1; killdeer, 1; mourning dove, 1; red-shafted flicker, 12; Say's phoebe, 1; horned lark, 8; Steller's jay, 2; Woodhouse's jay, 8; Am. crow, 1000 (est.); mountain chickadee, 2; bush-tit, 30 (est.); robin, 8; mountain bluebird, 25; ruby-crowned kinglet, 5; Am. pipit, 8; loggerhead shrike, 3; western meadowlark, 9; red-wing, 500 (est.); English sparrow, 30 (est.); Cassin's finch, 3; house finch, 20; Am. goldfinch, 3; spotted towhee, 2; brown towhee, 1; white-winged junco, 2+; Oregon junco, 3+; gray-headed junco, 1+; white-crowned sparrow, 6+. **Total,** 39 species; approximately 1739 individuals. — Carey H. Bennett, Elizabeth S. Arnold, Lee W. Arnold.

284. Lewiston, Idaho (mostly same area as other years; waterfront and creeks 50%, town 20%, orchards 15%, open farm and range 15%). — Dec. 21; dawn to dark with short time out near noon. Dark and cloudy except for short period in early p.m.; temp. 34° to 44° F.; wind 10 m.p.h.; ground bare; no ice on any waters. Seven observers in 2 groups in a.m., together in p.m. Total hours, 11; total miles, 55 (9 on foot, 46 in car). Western grebe, 1; pied-billed grebe, 1; great blue heron, 4; Canada goose, 1; mallard, 1167; pintail, 1; baldpate, 4; Am. golden-eye, 2; Am. merganser, 8; hooded merganser, 7; sharp-shinned hawk, 1; sparrow hawk, 3; ring-necked pheasant, 24; killdeer, 1; Wilson's snipe, 2; red-shafted flicker, 24; downy woodpecker, 1; Am. magpie, 15; mountain chickadee, 2; brown creeper, 1; northern shrike, 1; English sparrow, 600; western meadowlark, 6; red-wing, 34; Brewer's blackbird, 611 (one partly albino); house finch, 29; Am. goldfinch, 1; Oregon junco, 24; white-crowned sparrow (Gambel's), 10; song sparrow, 36. **Total,** 30 species; approximately 2622 individuals. (Seen in town on Dec. 19: Bohemian waxwing, 100.) — Mr. and Mrs. F. C. Gillett, Mr. and Mrs. Walter Weisman, R. E. Rodock, James Kenyon, Lorena Miller.

285. Bear River Migratory Bird Refuge, Brigham, Utah (same area as 1939 and subsequent counts; from refuge headquarters west along canal road, south and east over dikes to Perry, north following highway along foothills to Brigham,

west through fields and over salt flats, touching points along Bear River, and back to refuge headquarters). — Dec. 31; 9:30 a.m. to 3:30 p.m. Clear; ground partly snow-covered; wind W, 20-0 m.p.h.; temp. 20° at start, 22° at return. Three observers together. Total hours, 18; total miles, 43 (by car 42, on foot 1). Western grebe, 5; pied-billed grebe, 100; great blue heron, 13; black-crowned night heron, 6; Am. bittern, 1; whistling swan, 76; Canada goose, 116; mallard, 100; gadwall, 2; baldpate, 4; pintail, 12; canvas-back, 4; lesser scaup duck, 2; Am. golden-eye, 6; buffle-head, 2; ruddy duck, 4; hooded merganser, 1; Am. merganser, 22; red-breasted merganser, 16; Am. rough-legged hawk, 12; golden eagle, 6; bald eagle, 2; marsh hawk, 12; ring-necked pheasant, 65; Am. coot, 35; killdeer, 2; ring-billed gull, 95; short-eared owl, 2; red-shafted flicker, 2; horned lark, 90; Am. magpie, 42; Am. raven, 20; long-billed marsh wren, 8; Am. pipit, 35; English sparrow, 350; western meadowlark, 6; red-wing, 75; purple finch, 25; Am. goldfinch, 14; Oregon junco (Montana), 24; white-crowned sparrow (Gambel's), 12; song sparrow, 13. **Total,** 42 species; 1439 individuals. — Vanez T. Wilson, John B. Van den Akker, Leo Young.

286. Ogden, Utah (Hooper Waterfowl Run; Weber and Ogden Rivers; Burch Creek Hollow and Canyon; Ogden and Warm Water Canyons; Ogden City; cemeteries and parks; foothills and pastureland, hollows, swamps and river bottoms). — Dec. 22; dawn to dusk. Snow first 3 hours; overcast; no wind; temp. 30° at start, 40° at finish. Five observers working separately. Total hours, 34¼ (30¼ afoot, 4 by car); total miles, 124 (56 afoot, 68 by car). Pied-billed grebe, 3; great blue heron, 5; whistling swan, 39; Canada goose, 23; mallard, 237; baldpate, 1; pintail, 57; cinnamon teal, 10 [late date; no details — Ed.]; shoveller, 14; Am. merganser, 2; goshawk, 1; sharp-shinned hawk, 4; Cooper's hawk, 1; red-tailed hawk, 2; marsh hawk, 7; sparrow hawk, 3; dusky grouse, 1; California quail, 177; ring-necked pheasant, 206; Am. coot, 11; killdeer, 11; Wilson's snipe, 27; avocet, 1 (R. D. P.) [no details; late date — Ed.]; ring-billed gull, 20; screech owl, 2; horned owl, 3; long-eared owl, 1; short-eared owl, 7; saw-whet owl, 1 (R. E.); belted kingfisher, 4; red-shafted flicker, 65; Lewis's woodpecker, 2; downy woodpecker, 2; horned lark, 300; Steller's jay, 2; California jay, 8; Am. magpie, 210; Am. raven, 21; black-capped chickadee, 94; brown creeper, 3; dipper, 6; long-billed marsh wren, 1; robin, 1; Townsend's solitaire, 4; golden-crowned kinglet, 15; ruby-crowned kinglet, 15; Am. pipit, 13; waxwing (sp.) 40; northern shrike, 1; English sparrow, 143; western meadowlark, 104; red-wing, 25; Brewer's blackbird, 100; Cassin's finch, 14 (R. E.); house finch, 4; pine siskin, 220; goldfinch [sp.], 50; spotted towhee, 62; Oregon junco, 264; white-crowned sparrow (Gambel's), 2; song sparrow, 40. **Total,** 61 species; 2712 individuals. — Robert Erwin, Paul Newey, Ray Newey, Richard D. Porter, Roger L. Porter.

287. Salt Lake City, Utah (within a radius of 7½ miles of the City and County bldg.; canyons and bench lands 40%, water courses and open country 40%, city parks and suburban areas 20%). — Dec. 21; 7:30 a.m. to 5:30 p.m. Heavy fog with smoke at start, clearing somewhat by 10 a.m. with good visibility by noon. Crusted snow 2-3 inches on levels but ground bare on all sun-facing slopes. Temp. 26° at start, 30° at close. Twenty-four observers in 9 parties. Total miles, 160 (82 by car, 78 on foot); total party-hours, 65. Pied-billed grebe, 5; great blue heron, 1; Canada goose, 4; snow goose, 7; mallard, 533; gadwall, 31; baldpate, 1021; pintail, 4421; green-winged teal, 62; shoveller, 60; wood duck, 1 (M. R. C.); redhead, 3; Am. merganser, 3; Cooper's hawk, 2; sharp-shinned hawk, 5; red-tailed hawk, 8; Am. rough-legged hawk, 5; ferruginous rough-leg, 3; bald eagle, 2 (R. B. S.); golden eagle, 2; marsh hawk, 25; prairie falcon, 3; sparrow hawk, 14; Calif. quail, 1263; ring-necked pheasant, 217; Virginia rail, 6; Am. coot, 37; killdeer, 86; Wilson's snipe, 18; spotted sandpiper, 3 (W. A. B., Mrs. Lockerbie, Mrs. Jones — second record on Christmas count); Calif. gull, 217; ring-billed gull, 1529; mourning dove, 13; screech owl, 3; horned owl, 4; short-eared owl, 6; belted kingfisher, 1; red-shafted flicker, 144; Lewis's woodpecker, 3; yellow-bellied sapsucker, 1; downy woodpecker, 3; Say's phoebe, 1 (carefully noted at 2 different points during day — G. T., B. W.); horned lark, 67; Steller's jay, 3; scrub jay, 18; Am. magpie, 74; raven, 7; mountain chickadee, 12; black-capped chickadee, 86; brown creeper, 3; dipper, 1; rock wren, 1 (A. M. W. — first Christmas record); long-billed marsh wren, 29; robin, 430; hermit thrush, 5; Townsend's solitaire, 6; golden-crowned kinglet, 19; ruby-crowned kinglet, 1; Am. pipit, 21; Bohemian waxwing, 47; northern shrike, 2; loggerhead shrike, 1; Audubon's warbler, 5 (E. R. W.); northern water-thrush, 1 (carefully noted at 25 ft., call note also heard — C. W. L., K. R. T.); English sparrow, 5193; starling, 1143; western meadowlark, 243; red-wing, 1530; Brewer's blackbird, 3869; evening grosbeak, 39; purple finch, 1 (R. B. S.); house finch, 858; gray-crowned rosy finch, 1; black rosy finch, 73; pine siskin, 754; Am. goldfinch, 563; common redpoll, 5 (feeding with siskins and goldfinches; all field marks noted — R. B. S.); green-tailed towhee, 1 (R. F., M. H.); spotted towhee, 63; slate-colored junco, 7; Oregon junco, 773 (including pink-sided races, 3—Montana, 770); chipping sparrow, 1; tree sparrow, 3; white-crowned sparrow (Gambel's), 148; Harris's sparrow, 3 (R. B. S.); song sparrow, 223. **Total,** 86 species (1 additional subspecies); 26,109 individuals. The water-thrush was also observed a week later by census participants. (Waterfowl noted on Dec. 21 at Farmington Bay, 7 miles north of city: whistling swan, 11; Canada goose, 807; snow goose, 3000+; mallard,

200; pintail, 200; shoveller, 200; redhead, 8; Am. golden-eye, 2.) — Wm. A. Bader, M. R. Cheesman, J. Donald Daynes, Mrs. Daynes, son and daughter, Thayer Evans, Reed and Dick Ferris, Richard and Darrell Goodfellow, Paul Graham, Margaret Henriques, Mrs. Frank Jones, John Jones, Mr. and Mrs. C. W. Lockerbie, Dorothy Phelps, Rex B. Snow, Kenneth R. Tanner, Gordon Taylor, Bert Webb, E. R. and David Wilson, A. M. Woodbury, Garrett Steinblick.

288. Havasu Lake National Wildlife Refuge (Mohave and Yuma Cos.), Ariz. (Bill Williams Arm and Delta; open lake and barren shore-lines 20%, flooded dead brushlands 15%, mud flats 15%, and willow-cottonwood-arrowweed-mesquite 50%). — Dec. 20; 7:30 a.m. to 5 p.m. Cloudy to clear; wind NW to SE, 1-5 m.p.h.; temp. 40° to 65°. Total hours, 9½ (7½ afoot, 2 in outboard motor boat); total miles, 15 (7 afoot, 8 by boat). Observers together. Eared grebe, 1; western grebe, 49; pied-billed grebe, 11; white pelican, 2; double-crested cormorant, 71; great blue heron, 10; Am. egret, 8; snowy egret, 2; black-crowned night heron, 10; Canada goose, 75; mallard, 12; gadwall, 75; pintail, 1; green-winged teal, 345; baldpate, 3; shoveller, 45; lesser scaup duck, 1; buffle-head, 1; ruddy duck, 6; Am. merganser, 7; red-breasted merganser, 8; sharp-shinned hawk, 1; Am. rough-legged hawk, 1 (observed at close quarters both perching and flying, black belly and white base of tail especially noted); duck hawk, 2; sparrow hawk, 1; Gambel's quail, 44; Am. coot, 179; killdeer, 22; Wilson's snipe, 15; spotted sandpiper, 3; least sandpiper, 460; dowitcher, 1; avocet, 5; ring-billed gull, 23; screech owl, 1; belted kingfisher, 2; red-shafted flicker, 11; gilded flicker, 1; Gila woodpecker, 10; ladder-backed woodpecker, 4; black phoebe, 7; Say's phoebe, 11; vermilion flycatcher, 8; violet-green swallow, 1; California jay, 2; Am. raven, 2; verdin, 5; bush-tit, 3; house wren, 2; Bewick's wren, 13; rock wren, 4; mockingbird, 4; crissal thrasher, 4; hermit thrush, 1; chestnut-backed bluebird, 1; gnatcatcher (sp.), 16; ruby-crowned kinglet, 35; Am. pipit, 23; phainopepla, 21; loggerhead shrike, 2; orange-crowned warbler, 1; Audubon's warbler, 55; yellow-throat, 1; western meadowlark, 56; house finch, 1; Abert's towhee, 9; white-crowned sparrow (Gambel's), 1; song sparrow, 11. **Total,** 68 species; about 1829 individuals. — Gale Monson, Warren Pulich.

289. Imperial National Wildlife Refuge, Yuma, Ariz. (refuge 17 miles north of Yuma; vicinity of Imperial Dam and southeast along shores of Lake Laguna; lake, marsh, desert, and flooded brush-land types). — Dec. 28; 7:25 a.m. to 4:30 p.m. Scattered high clouds; wind N, light; temp 52° to 74°. Observers together. Total hours afield, 9; total miles, 21 (1 on foot, 20 by car). Mexican grebe, 2 (A. F. H.); western grebe, 1; pied-billed grebe, 5; white pelican, 1; double-crested cormorant, 24; great blue heron, 7; Am. egret, 70; snowy egret, 4; black-crowned night heron, 112; whistling swan, 2; Canada goose, 156 (lesser (?) Canada goose, 6); lesser snow goose, 122; ducks (unidentified), 108; mallard, 4; gadwall, 47; baldpate, 1; pintail, 2; green-winged teal, 5; shoveller, 8; redhead, 20; ring-necked duck, 6; canvas-back, 2; lesser scaup duck, 13; ruddy duck, 5; turkey vulture, 3; sharp-shinned hawk, 1; red-tailed hawk, 2; Harris's hawk, 1; marsh hawk, 2; sparrow hawk, 1; Gambel's quail, 104; Am. coot, 347; killdeer, 3; spotted sandpiper, 3; least sandpiper, 11; dowitcher (long-billed), 10; mourning dove, 1; road-runner, 1; belted kingfisher, 1; red-shafted flicker, 5; Gila woodpecker, 1; cactus woodpecker, 1; black phoebe, 5; Say's phoebe, 3; vermilion flycatcher, 1; tree swallow, 27; verdin, 1; cactus wren, 1; mockingbird, 1; Bendire's thrasher, 1; crissal thrasher, 1; robin, 3; blue-gray gnatcatcher, 4; phainopepla, 4; ruby-crowned kinglet, 2; loggerhead shrike, 6; Bell's vireo, 1; yellow warbler, 1 [no details — Ed.]; Audubon's warbler, 3; yellow-throat, 1; English sparrow, 3; meadowlark [sp.], 1; house finch, 1; spotted towhee, 1; Abert's towhee, 4; chipping sparrow, 9; white-crowned sparrow (Gambel's), 6. **Total,** 66 species (1 additional subspecies); 1316 individuals. — Arthur F. and Audrey G. Halloran.

290. Santa Catalina Mts., Ariz. (usual area, south slope; pines and firs 23%, chaparral belt 3%, oak woods 10%, foothill canyons 8%, desert and foothills 9%, ranches and ponds 34%, cottonwood-willow-mesquite 13%). — Dec. 28; 4:35 a.m. to 5:45 p.m. Fair; light winds limited to highest ridges and cold-air drainages; temp in foothills 43° to 72°+, at Summerhaven 23° to 39°; snowdrifts up to 18 inches deep at top of mountains, except on south-facing slopes; patches down to 7000 feet. Twenty-two observers in 10 parties. Total party-hours, 77; total miles, 189 (43 on foot, 146+ by car). Pied-billed grebe, 4; great blue heron, 1; green heron, 2; mallard, 2; gadwall, 1; baldpate, 4; green-willed teal, 1; ring-necked duck, 1; canvas-back, 4; lesser scaup duck, 1; sharp-shinned hawk, 8; Cooper's hawk, 3; red-tailed hawk, 9; marsh hawk, 4; sparrow hawk, 15; Gambel's quail, 63; sora, 1; Am. coot, 20; killdeer, 18; Wilson's snipe, 3; mourning dove, 103; Inca dove, 6; road-runner, 5; screech owl (*asio*), 1; horned owl, 6; white-throated swift, 25; belted kingfisher, 1; red-shafted flicker, 34+; gilded flicker, 17+; Gila woodpecker, 92+; Lewis's woodpecker, 1 (G. G. J., I. P.); yellow-bellied sapsucker, 8; Williamson's sapsucker, 3; hairy woodpecker, 12; ladder-backed woodpecker, 15; Arizona woodpecker, 3; black phoebe, 15; Say's phoebe, 17; vermilion flycatcher, 2; horned lark, 10; swallow (sp.), 1 (E. D. M., V. M. M.); Steller's jay, 23+; scrub jay, 11; Arizona jay, 37+; Am. raven, 8; mountain chickadee, 62; bridled titmouse, 19+; verdin, 61+; bush-tit, 90; white-breasted nuthatch, 25; red-breasted nuthatch, 28; pygmy nuthatch, 138+; brown creeper, 15; house

wren, 3; Bewick's wren, 29; cactus wren, 75+; long-billed marsh wren, 4; cañon wren, 7; rock wren, 10; mockingbird, 21+; Bendire's thrasher, 6; curve-billed thrasher, 77+; crissal thrasher, 5; robin, 25; hermit thrush, 20+ (plus 3 unidentified *Hylocichlas*); Mexican bluebird, 166; mountain bluebird, 40; Townsend's solitaire, 8; blue-gray gnatcatcher, 1; plumbeous gnatcatcher, 1 (plus 11 unidentified gnatcatchers); ruby-crowned kinglet, 108+; Am. pipit, 30; cedar waxwing, 5; phainopepla, 44; loggerhead shrike, 6; solitary vireo, 1; orange-crowned warbler, 1; olive warbler, 1 (collected); Audubon's warbler, 21; black-throated gray warbler, 1; yellow-throat, 2; English sparrow, 233; eastern meadowlark, 6; western meadowlark, 21 (plus 154 unidentified meadowlarks); yellow-headed blackbird, 3; red-wing, 476; Brewer's blackbird, 320; cowbird, 51; cardinal, 48; pyrrhuloxia, 17; evening grosbeak, 1; house finch, 162+; pine siskin, 4; Am. goldfinch, 4; Arkansas goldfinch, 6; red crossbill, 6; green-tailed towhee, 2; spotted towhee, 42+; brown towhee, 44; Abert's towhee, 13; lark bunting, 40; Savannah sparrow, 10; vesper sparrow, 30; lark sparrow, 42; rufous-crowned sparrow, 15; black-throated sparrow, 29+; slate-colored junco, 2 (L. L. H.); Oregon junco, 225 (Shufeldt's type, including *montanus*, 196+; Thurber's, 2 (1 collected); pink-sided, 25; also hybrid juncos, 2 L. L. H.); gray-headed junco (including *dorsalis* intergrades), 20; Arizona junco, 31+; chipping sparrow, 323; Brewer's sparrow, 30+; black-chinned sparrow, 16; white-crowned sparrow, 482 (typical white-crowned, 1 — A. J. F.; Gambel's 481); fox sparrow, 12 (reported by 3 parties); Lincoln's sparrow, 11; song sparrow. 27. **Total,** 117 species (3 additional subspecies and 1 hybrid); approximately 4749 individuals. Area unchanged except that ducks are now being protected by new owner of Agua Caliente Ranch. Seen in census period: Anna's hummingbird, 1 (regularly); beardless flycatcher, 1 (regularly — Mrs. Thornburg). Also seen recently: Dec. 11, white-winged dove, 1; Jan. 3-6: pintail, 4; ruddy duck, 1; ferruginous pygmy owl, 1 (collected); Hutton's vireo, 5; Bullock's oriole, 1 (V. M. M., A. R. P., *et al.*; reported present a month.) — A. H. Anderson, R. E. Collins, Mr. and Mrs. W. X. Foerster, T. M. Hall, L. L. Hargrave, Mrs. R. S. Holland, E. C. Jacot, Mr. and Mrs. Ralph Johnson, G. G. Jones, Mrs. L. C. Marvin, Mr. and Mrs. E D. Morton, Mrs. E. T. Nichols, Ivan Peters, A. R. Phillips, Mrs. E. W. Steele, R B. Streets, Mr. and Mrs. R J. Thornburg, E. R. Tinkham (Bird Club of Tucson Natural History Society, and guests).

291. Tucson, Ariz. (Santa Cruz River valley and vicinity, usual area centering 2½ miles south and just west of heart of town; irrigated fields and farmlands 42%, river-bottom cottonwoods and mesquite mesa 21%, mesquite-creosote flats 14%, homes and yards 9%, saguaro-palo verde hills 7%, stockyard areas 5%, ponds 2%). — Dec. 20; 6:25 a.m. to 5:45 p.m. Hazy to cloudy; wind SE, strong most of daylight hours; temp. 37° to 72° in eastern part (but below freezing at river in southern part of area). Ten observers in 5 parties, plus casual observations at their homes by 2 others. Total party-hours, 40; total miles, 140 (afoot 18, by car 122). Green-winged teal, 12; shoveller, 36; black vulture, 73; sharp-shinned hawk, 8; Cooper's hawk, 4; red-tailed hawk, 8+; marsh hawk, 6; prairie falcon, 2; pigeon hawk, 1; sparrow hawk, 27; Gambel's quail, 93+; killdeer, 94+; least (?) sandpiper, 26+; mourning dove, 302+; ground dove, 5; Inca dove, 79; road-runner, 2; screech owl (*asio*), 2; horned owl, 2; burrowing owl, 1; white-throated swift. 34+; belted kingfisher, 1; red-shafted flicker, 60+; gilded flicker, 8; Gila woodpecker, 50+; Lewis's woodpecker, 5; ladder-backed woodpecker, 9; black phoebe, 18; Say's phoebe, 23; vermilion flycatcher, 11; horned lark, 750+ (migrants; at least 2 races); scrub jay, 1 (A. J. F., L. M.); Am. raven, 2; bridled titmouse, 6; verdin, 21; white-breasted nuthatch, 2; brown creeper, 1 (A.J.F., W.X.F., L.M., I.P.); house wren, 11; Bewick's wren, 4; cactus wren, 29+; rock wren, 10; mockingbird, 6; curve-billed thrasher, 10; crissal thrasher, 6; sage thrasher, 1; robin, 22; hermit thrush, 3; mountain bluebird, 281+; blue-gray gnatcatcher, 5; plumbeous gnatcatcher, 4 (plus 2 unidentified gnatcatchers); ruby-crowned kinglet, 37+; Am. pipit, 32; cedar waxwing, 56+; phainopepla, 5; loggerhead shrike, 27; Hutton's vireo, 1; solitary vireo, 5 (Cassin's, 4; plumbeous, 1, collected); orange-crowned warbler, 1; Audubon's warbler, 57+; yellow-throat, 1; English sparrow, 1986+; western meadowlark, 175 (plus 484+ unidentified meadowlarks); yellow-headed blackbird, 4; red-wing, 277; Brewer's blackbird, 112+; boat-tailed grackle, 30+; brown-headed cowbird, 719; bronzed cowbird, 1 (E. D. M., V. M. M.); cardinal, 19; pyrrhuloxia, 31; house finch, 760+; Am. goldfinch, 3; Arkansas goldfinch, 4; Lawrence's goldfinch, 20; green-tailed towhee, 3; spotted towhee, 3; brown towhee, 27+; Abert's towhee, 49; lark bunting, 34; Savannah sparrow, 20; vesper sparrow, 41; lark sparrow, 249+; rufous-winged sparrow, 2 (A. R. P.); black-throated sparrow, 29+; Oregon junco, 2; chipping sparrow, 125; Brewer's sparrow, 8; white-crowned sparrow (Gambel's), 424+; fox sparrow, 1 (A. J. F., L. M., I. P.); Lincoln's sparrow, 6; song sparrow, 5; long-spur (sp.), 1 (A. R. P.). **Total,** 92 species (1 additional subspecies); approximately 8055 individuals. (Seen Dec. 22-26: yellow-bellied sapsucker, 3; cañon wren, 1; Bendire's thrasher, 3; black-chinned sparrow, 1.) — Mrs. S. Becker, Mr. and Mrs. W. X. Foerster, T. M. Hall, Mrs. L. C. Marvin, Louise Micklewright, Mr. and Mrs. E. D. Morton, Ivan Peters, A. R. Phillips, E. R. Tinkham, C. T. Vorhies (Bird Club of Tucson Natural History Society).

292. Seattle, Wash. (districts in city Woodland Park, Green Lake, government locks, Golden Gar-

dens, Boeing Ponds, South Park, Arboretum, First Ave., So., and Airport Way, Magnolia Park, Volunteer Park, Alki Beach, Lincoln and Schmidt Park, also across Lake Washington from Kirkland to Newport, Bellevue and Medina). — Dec. 28; 8 a.m. to 3:30 p.m. Overcast, light rain before 8 a.m. and at 1:30 p.m.; average temp. 44°; wind SW, 15 m.p.h.; poor visibility. Twenty-nine observers in 15 parties. Total party-hours, 90; total party-miles 42. Common loon, 4; western grebe, 419; Holboell's grebe, 5; horned grebe, 35; eared grebe, 27; pied-billed grebe, 19; double-crested cormorant, 35; Baird's cormorant, 21; Brandt's cormorant, 5; great blue heron, 11; Am. bittern, 2; Canada goose, 31; mallard, 710; gadwall, 23; European widgeon, 1; baldpate, 1735; green-winged teal, 98; shoveller, 781; pintail, 84; canvas-back, 42; greater scaup duck, 820; lesser scaup duck, 821; ring-necked duck, 3; Am. golden-eye, 131; Barrow's golden-eye, 2; bufflehead, 119; harlequin duck, 8; white-winged scoter, 55; surf scoter, 64; ruddy duck, 321; Am. merganser, 98; red-breasted merganser, 251; hooded merganser, 8; sharp-shinned hawk, 5; Cooper's hawk, 3; red-tailed hawk, 1; pigeon hawk, 2; sparrow hawk, 2; California quail, 30; ring-necked pheasant, 32; Virginia rail, 1; Am. coot, 1692; killdeer, 18; Wilson's snipe, 2; red-backed sandpiper, 2; glaucous-winged gull, 5396; herring gull, 19; California gull, 19; ring-billed gull, 10; short-billed gull, 657; Bonaparte's gull, 44; ancient murrelet, 1; pigeon guillemot, 1; band-tailed pigeon, 329; long-eared owl, 1; short-eared owl, 1; belted kingfisher, 3; Gairdner's woodpecker, 10; pileated woodpecker, 1; red-shafted flicker, 87; Am. crow, 24; Steller's jay, 13; black-capped chickadee, 368; chestnut-backed chickadee, 14; red-breasted nuthatch, 2; brown creeper, 1; Bewick's wren, 26; winter wren, 15; long-billed marsh wren, 3; hermit thrush, 5; varied thrush, 152; robin, 2139; golden-crowned kinglet, 134; ruby-crowned kinglet, 33; Am. pipit, 50; cedar waxwing, 222; Hutton's vireo, 4; Audubon's warbler, 11; Townsend's warbler, 5; redwing, 2; western meadowlark, 42; Brewer's blackbird, 102; English sparrow, 272; evening grosbeak, 10; purple finch, 866; Am. goldfinch, 68; pine siskin, 1259; spotted towhee, 76; fox sparrow, 13; slate-colored junco, 1; Oregon junco, 372; golden-crowned sparrow, 4; song sparrow, 252. **Total,** 93 species; 21,718 individuals. — Mr. and Mrs. J. Grove, Mr. and Mrs. A. Forsman, Max and Violet Cannon, H. W. Higman, Mrs. M. Larrison, Mr. and Mrs. E. Scannell, Kate Thompson, Lucy Schildknecht, John Frost, Neal Twelves, C. C. Denman, Mr. and Mrs. Grover Henretty, Bernice Jennings, E. Lumley, Joan Laval, Ica Marks, Katherine Schumacher, Helen Anderson, Bertha Schuler, Doris Jelliffe, Mrs. C. R. Chadwick, Marjorie Converse, Peter Jensen, Walter Hagenstein.

293. Spokane, Wash. (city parks, cemeteries, some residential districts, area along Spokane River). — Dec. 21; 9 a.m. to 3 p.m. Overcast all day, light snow falling in a.m.; temp. 30° to 35°; no wind; ground practically bare. Total miles, 100 (85 by car, 15 on foot.) Great blue heron, 5; mallard, 392; Am. golden-eye, 84; buffle-head, 1; European partridge, 7; California quail, 30; ring-necked pheasant, 21; killdeer, 1; Canada goose, 11; flicker [sp.], 23; Am. magpie, 18; chickadee [sp.], 45; white-breasted nuthatch, 3; red-breasted nuthatch, 3; pygmy nuthatch, 110; brown creeper, 8; dipper, 1; robin, 14; Townsend's solitaire, 2; golden-crowned kinglet, 35; Bohemian waxwing, 1820 (5 flocks widely separated); English sparrow, 135; red-wing, 50; evening grosbeak, 8; house finch, 7; junco [sp.], 93; song sparrow, 19. **Total,** 27 species; 2946 individuals. — Mr. and Mrs. Wm. B. Wright, Mrs. Cora Roberts, Mattie Burke, Marie Coyne, Belle Bothwell, Gertrude Gentsch, Mr. and Mrs. Steve Stanley, Harry Thompson, Mr. and Mrs. Chas. Tiegen, Earl Pettibone, Theo. Turner (Spokane Bird Club).

294. Eugene, Oreg. (same area as 1946 count; mud flats 15%, deciduous forest 20%, coniferous forest 5%, pasture and barnyards 30%, cultivated fields 30%). — Dec. 28; 8 a.m. to 6 p.m. Heavy overcast most of day, 6 squalls giving 0.06 in. of precipitation; temp. 42° F. throughout period; wind S, 13-10 m.p.h.; ground generally flooded; water open. Fifteen observers in 9 parties. Total hours, 52 (25 afoot, 27 by car); total miles, 166 (29 afoot, 137 by car). — Eared grebe, 5; western grebe, 3; pied-billed grebe 3; double-crested cormorant, 1; great blue heron, 2; Canada goose, 1780 (including the subspecies: common Canada goose, 1633; white-cheeked goose, 72; cackling goose, 23; lesser Canada goose, 52; races easily distinguished in mixed flocks at low elevation against clouds — G. W. G.); snow goose, 3; white-fronted goose, 1; unidentified geese, 400; mallard, 594; gadwall, 5; green-winged teal, 66; baldpate, 7; pintail, 264; shoveller, 15; wood duck, 1; ring-necked duck, 1; canvas-back, 6; lesser scaup duck, 28; buffle-head, 1; ruddy duck, 1; unidentified ducks, 5550; goshawk, 1; sharp-shinned hawk, 3; Cooper's hawk, 2; red-tailed hawk, 17; bald eagle, 2; marsh hawk, 7; duck hawk, 1; pigeon hawk, 2; sparrow hawk, 24; bob-white, 25; ring-necked pheasant, 161; Am. coot, 2; killdeer, 229; Wilson's snipe, 31; greater yellow-legs, 8; least sandpiper, 800 (est.); red-backed sandpiper, 25; dowitcher, 2; western sandpiper, 14; glaucous gull, 2 (very large gull with light mantle and white unmarked primaries — A. R. W.); ring-billed gull, 3; Bonaparte's gull, 45; mourning dove, 3; burrowing owl, 1 (G. W. G.); short-eared owl, 1; belted kingfisher, 3; red-shafted flicker, 201; yellow-shafted flicker (hybrid), 2 (seen at close range—B. P., H. P.); California woodpecker, 8; Lewis's woodpecker, 24; Williamson's sapsucker, 8 (A. W. G., K. D.); hairy woodpecker, 3; downy woodpecker, 2; horned lark, 2; Steller's jay, 61; California jay, 3; raven, 10; Am. crow, 411; black-capped chickadee, 83; chestnut-backed chick-

adee, 4; bush-tit, 2; white-breasted nuthatch, 2; winter wren, 19; Bewick's wren, 9; long-billed marsh wren, 3; robin, 675; varied thrush, 26; hermit thrush, 5; bluebird [sp.], 18; golden-crowned kinglet, 199; ruby-crowned kinglet, 138; Am. pipit, 77; northern shrike, 1; Hutton's vireo, 2; Audubon's warbler, 51; Townsend's warbler, 2; English sparrow, 104; western meadowlark, 163; red-wing, 255; Brewer's blackbird, 2317; evening grosbeak, 9; purple finch, 32; house finch, 6; Am. goldfinch, 36; spotted towhee, 74; Savannah sparrow, 25; Oregon junco, 1192; white-crowned sparrow, 25; golden-crowned sparrow, 102; fox sparrow, 13; Lincoln's sparrow, 2 (seen at close range — B. P., H. P., G. W. G.); song sparrow, 97. **Total,** 92 species (3 additional subspecies); 16,654 individuals. (Seen in area Dec. 26: red-throated loon, 1; hooded merganser, 3; black-bellied plover, 1; spotted sandpiper, 1; snowy owl, 1; pileated woodpecker, 1; starling, about 100 — first record in this area.) — William L. Siegman, Catherine Dunlop, A. Ray Wiseman, Anna W. Gullion, Ben Pruitt, Hal Pruitt, Garry Vincent, Robert Armes, Helen Kilpatrick, Ada Shuey, J. Hugh Pruett, Mrs. George Saundern, Hazel Tulecke, Carolyn Trump, Gordon W. Gullion.

295. Portland, Oreg. (15-mile diameter, centered downtown, same as 1938 and subsequent counts; brushy lowlands 20%, lakes and rivers 16%, woodlands 24%, farmlands 20%, residential areas 20%). — Dec. 28. Cloudy with showers; temp. 44° to 47° F.; wind SW, 10-20 m.p.h. Sixty-three observers in 15 parties. Total hours, 112 (87 on foot, 25 by auto); total miles, 278 (91 on foot, 187 by car). Western grebe, 2; pied-billed grebe, 2; double-crested cormorant, 39; great blue heron, 48; green heron, 1; Canada goose, 38; mallard, 1700; gadwall, 14; European widgeon, 1; baldpate, 3855; pintail, 362; green-winged teal, 5010; shoveller, 118; ring-necked duck, 19; canvas-back, 9; lesser scaup duck, 27; buffle-head, 62; ruddy duck, 15; Am. merganser, 29; unidentified ducks, 36; sharp-shinned hawk, 7; Cooper's hawk, 6; red-tailed hawk, 9; osprey, 1 (Leo Simon); pigeon hawk, 2; sparrow hawk, 18; ruffed grouse, 1; bob-white, 1; California quail, 5; ring-necked pheasant, 125; Am. coot, 215; killdeer, 55; Wilson's snipe, 161; spotted sandpiper, 1; glaucous-winged gull, 3877; herring gull, 64; California gull, 197; ring-billed gull, 9; short-billed gull, 1870; unidentified gulls, 1763; band-tailed pigeon, 39; mourning dove, 11; screech owl, 4; snowy owl, 1; (Robt. Tucker); short-eared owl, 1; belted kingfisher, 10; red-shafted flicker, 230; red-breasted sapsucker, 1; hairy woodpecker, 1; downy woodpecker, 35; Steller's jay, 31; California jay, 2; Am. crow, 2156; black-capped chickadee, 464; mountain chickadee, 4; chestnut-backed chickadee, 87; bush-tit, 115; white-breasted nuthatch, 6; red-breasted nuthatch, 11; brown creeper, 7; winter wren, 41; Bewick's wren, 31; robin, 435; varied thrush, 85; hermit thrush, 13; bluebird [sp.], 17; golden-crowned kinglet, 344; ruby-crowned kinglet, 81; Am. pipit, 357; shrike [sp.], 2; starling, 4 (not previously recorded from Portland — Forbes); Hutton's vireo, 3; myrtle warbler, 1; Audubon's warbler, 86; Townsend's warbler, 6; English sparrow, 436; western meadowlark, 100; red-wing, 60; Brewer's blackbird, 1583; evening grosbeak, 112; purple finch, 66; house finch, 87; pine siskin, 262; Am. goldfinch, 225; green-backed goldfinch, 35; spotted towhee, 127; slate-colored junco, 1; Oregon junco, 1789; white-crowned sparrow, 7; golden-crowned sparrow, 105; fox sparrow, 11; Lincoln's sparrow, 1; song sparrow, 962. **Total,** 91 species; approximately 30,465 individuals. — Norbert Leupold, Norbert Leupold, Jr., John Ripley Forbes, Mr. and Mrs. Earl A. Marshall, David B. Marshall, Albert W. Marshall, Nancy Marshall, Tom McAllister, Ben F. Layman, Mr. and Mrs. H. C. Judd, Mr. and Mrs. Frank Bartlett, Thomas McCamant, John McCamant, Virginia Edwards, Mella White, Brian McNab, Mrs. W. B. Holden, Mr. and Mrs. Leo F. Simon, William H. Telfer, Edward A. Kelham, H. Steinbrugge, J. R. Williams, N. G. Seaman, Arlie Seaman, Mrs. Higgins, O. E. Wheeler, Mrs. F. Blakeslee, Mrs. Schuck, Mrs. John Sargent, Clyde L. Keller, Barbara Keller, Waldo Ek, Joyce Wildes, Isabel Wildes, Mrs. Susie J. Nicholson, Mr. and Mrs. J. W. C. Williams, Esther Maegly, Mrs. Ormond Rankin, Mrs. Harry M. Hendershott, Kenneth Leatherman, Richard Tucker, Louise Linthicum, Mrs. Abbott Mills, Mr. and Mrs. Leslie W. Bartow, Robert Millette, Ernest F. Tucker, Mrs. Robert Livingstone, Robert Livingstone, Jr., P. E. Lewis, T. T. Munger, Osgood Munger, C. L. Marshall, Alva Oakes, Jean Sinclair, H. H. Crowell, Mr. and Mrs. W. H. Crowell (Oregon Audubon Society).

296. Benicia (Solano Co.), Calif. (same area as in 1933 and several subsequent years; observers together by car with frequent stops to canvass marsh, waterfront, and live-oak hill area along highway between Benicia and Cordelia, these towns being 14 miles apart; Benecia waterfront 30%, marsh 20%, open fields 10%, hills 40%). — Dec. 28; 8 a.m. to 5 p.m. Foggy in a.m., clear in p.m.; wind W, 8-12 m.p.h.; temp. 38° to 46° F. Total hours, 19 (9 by senior observer, 5 each by juniors, 17 on foot, 2 by car); total miles, 50 (20 afoot, 30 by car). Western grebe, 3; great blue heron, 1; Am. egret, 12; snowy egret, 5; black-crowned night heron, 12; lesser snow goose, 250 (est.); pintail, 20; green-winged teal, 1; shoveller, 160; canvas-back, 750 (est.); lesser scaup duck, 30; ruddy duck, 32; red-tailed hawk, 10; marsh hawk, 4; sparrow hawk, 19; Virginia rail, 1; Am. coot, 800 (est.); killdeer, 30; black-bellied plover, 60; Wilson's snipe, 1; red-backed sandpiper, 42; western gull, 58; California gull, 8; ring-billed gull, 2; Bonaparte's gull, 90; band-tailed pigeon, 2; barn owl, 1; red-shafted flicker, 16; downy woodpecker, 1; California jay, 13; plain titmouse, 6; bush-tit, 50; long-billed

marsh wren, 2; robin, 1200 (est.); hermit thrush, 8; ruby-crowned kinglet, 35; Am. pipit, 20; cedar waxwing, 32; loggerhead shrike, 27; Audubon's warbler, 55; English sparrow, 140; western meadowlark, 275; red-wing, 8; Brewer's blackbird, 2700 (est.); house finch, 230; Am. goldfinch, 49; Arkansas goldfinch, 8; brown towhee, 1; Savannah sparrow, 40; junco [sp.], 70; white-crowned sparrow (Nuttall's), 130; golden-crowned sparrow, 115; song sparrow, 10. **Total,** 53 species; about 7645 individuals. The many hunters in this area caused waterfowl to be wary. Most of the waterfowl observed were at too great a distance to identify and are not included in this count. — Emerson A., Donald E., and Marjorie M. Stoner.

297. Berkeley, Calif. (Berkeley Pier which extends 2.6 miles out into San Francisco Bay, Berkeley Aquatic Pond, a portion of the Bay Shore Highway (3 miles), Lake Temescal and at 1508 La Loma Avenue, Berkeley). — Dec. 23; 7:30 a.m. to 4:30 p.m. High haze, visibility about 3 miles. Temp. 46° to 59°.; wind, none. Total miles, 30 (6 on foot, 24 by car). Red-throated loon, 1; eared grebe, 12; western grebe, 27; double-crested cormorant, 38; Am. egret, 2; pintail, 2; canvas-back, 42; scaup duck (greater and lesser), 6063 (partial est.); Am. golden-eye, 4; surf scoter, 427; ruddy duck, 916; Am. merganser, 6; red-breasted merganser, 4; sparrow hawk, 3; California quail, 16; Am. coot, 22; killdeer, 1; black-bellied plover, 11; willet, 155; least sandpiper, 25; western sandpiper, 500 (partial est.); red-backed sandpiper, 75; glaucous-winged gull, 1646 (partial est.); western gull, 200; herring gull, 142; ring-billed gull, 3; Bonaparte's gull, 162; belted kingfisher, 1; red-shafted flicker, 2; California jay, 2; red-breasted nuthatch, 1; robin, 3; Am. pipit, 1; Audubon's warbler, 1; English sparrow, 8; spotted towhee, 1; brown towhee, 9; white-crowned sparrow, 1; golden-crowned sparrow, 6; fox sparrow, 4; Lincoln's sparrow, 5; song sparrow, 8. **Total,** 42 species; 10,558 individuals. (Seen at Camp Jewell and Lake Anza, Dec. 22: mallard, 2; ring-necked duck, 41; sharp-shinned hawk, 2; red-tailed hawk, 2; Anna's hummingbird, 1; mourning dove, 2; black phoebe, 2; Steller's jay, 1; bush-tit, 6; wren-tit, 2; junco [sp.], 65.) — F. Scott.

298. Big Bear Lake, Calif. (parts of a 15-mile diameter circle centering near Bertha Peak in the San Bernardino Mountains about 3 miles NNE of Big Bear Lake P. O. and extending throughout Bear Valley and to Box H Springs on the desert slope and to the bottom of upper Santa Ana Canyon near Seven Oaks on the Pacific slope; altitudinal range 3500-7200 ft.; nearly the same area as taken since 1941; coniferous forest 37%, mountain lakes and open shore 12%, mountain meadow 7%, piñon-juniper association 7½%, sagebrush 1½%, creosote bush association 10%, desert willows and cottonwoods 7%, alders, oaks, and canyon stream 8%, chaparral 10%). — Dec. 20; 5:30 a.m. to 5 p.m. Clear in a.m., dense clouds coming up from coastal slope canyons in mid-afternoon; sprinkles of rain and snow from thickening clouds at dusk; wind SW, about 25 m.p.h. before dawn, decreasing to 10-15 m.p.h. during a.m. and increasing again in p.m., steadily strong on desert; temp., about 25° F. in Santa Ana Canyon and 30° F. on desert slope at start, maximum about 60° F.; snow 1-1½ ft. deep on north facing slopes above 6000 ft., less on exposed slopes which were mostly bare below 8000 ft.; lakes completely frozen except for 3 small open areas. Nine observers in 4 parties. Total hours, 33½ (on foot or with numerous short side trips from cars); total miles, approximately 25 afoot and 96 by car. Common (?) loon, 1; eared grebe, 2; pied-billed grebe, 2; great blue heron, 8; mallard, 4; gadwall, 2; baldpate, 22; pintail, 64; blue-winged teal, 3 (M. S. D. — our first winter record for this region); cinnamon teal, 8; shoveller, 28; redhead, 16; canvas-back, 78; lesser scaup duck, 32; Am. golden-eye, 2 (M. S. D.); ruddy duck, 2; Am. merganser, 22; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 9; bald eagle, 2; sparrow hawk, 5; mountain quail, 11; Am. coot, 900 (est. — 1 caught and eaten by Cooper's hawk); killdeer, 3; Wilson's snipe, 1; ring-billed gull, 1; band-tailed pigeon, 16; mourning dove, 2; Chinese spotted dove, 2 (Mrs. Getrude Woods and party — the birds were near ranch buildings on the desert slope; residents stated that they had first appeared there about 6 months ago); horned owl, 1; small owl (sp.— seen briefly in auto headlights), 1; belted kingfisher, 1 (along Santa Ana River — first winter record); red-shafted flicker, 36; California woodpecker, 19; Lewis's woodpecker, 3; yellow-bellied sapsucker (red-breasted), 2; hairy woodpecker, 9; cactus woodpecker, 1; Nuttall's woodpecker, 4; white-headed woodpecker, 1; black phoebe, 2; Say's phoebe, 5; Steller's jay, 75; California jay, 25; Am. raven, 2; Am. crow, 2 (near desert willows, seen and heard "cawing" — Mrs. G. W. and party); Clark's nutcracker, 98 (including a most unusual concentration in the area west and south of Baldwin Lake, 3 flocks of 30-34 each, two of which were definitely distinct — J. M., LaV. M.); mountain chickadee, 208; plain titmouse, 11; bush-tit, 60; white-breasted nuthatch, 16; red-breasted nuthatch, 17; pygmy nuthatch, 120; brown creeper, 6; wren-tit, 8; dipper, 2; winter wren, 1; Bewick's wren, 6; cactus wren, 6; rock wren, 2; California thrasher, 4; Leconte's thrasher, 1; robin, 280 (partly est.); hermit thrush, 2; Mexican bluebird, 44; mountain bluebird, 8; Townsend's solitaire, 7; blue-gray gnatcatcher, 4; ruby-crowned kinglet, 14; cedar waxwing, 3; loggerhead shrike, 6; Audubon's warbler, 1; western meadowlark, 8; red-wing, 4; Brewer's blackbird, 23+; purple finch, 2; Cassin's finch, 23; house finch, 2; finches, unidentified, 7; pine siskin, 138; Arkansas goldfinch, 24; Lawrence's goldfinch, 85; goldfinches, unidentified, 114; spotted towhee, 29; brown towhee, 3; Savannah sparrow,

2; slate-colored junco, 1; Oregon junco, 175 (partly est.); white-crowned sparrow, 27; golden-crowned sparrow, 2; fox sparrow, 6; song sparrow, 11. **Total,** 91 species; about 3060 individuals. — Howard L. Cogswell, Merritt S. Dunlap, Kim B. Hendy, Ralph Mall, James and LaVon Murdock, Rolland Truman, Gertrude and Jo Ann Woods.

299. Calipatria, Calif. (south end of Salton Sea; 15-mile circle with approximate center at North End School, including Calipatria, State Game Refuge, Mullet Island, part of Federal Refuge on the Salton Sea, irrigated fields from Westmoreland to within a mile of Niland. Same area covered in pre-war years. Approximately 241 feet below sea-level throughout except slightly higher on Mullet Island, Obsidian Buttes, etc.; dry, cultivated fields 10%, irrigated fields 27%, weedy roadsides and ditch banks 21%, lakes 9%, stream and riparian border 9%, shore of Salton Sea 24%). — Dec. 28; 5:45 a.m. to 5:30 p.m. Clear throughout the day, light wind, temp. 35° to 70°. Eight observers in 2 parties. Total hours, 17 (on foot or with numerous short side trips from cars); total miles, 74½ (approx. 9½ on foot, 65 by car). Eared grebe, 1000+; pied-billed grebe, 3; white pelican, 14; double-crested cormorant, 4; great blue heron, 33; Am. egret, 232; snowy egret, 178; black-crowned night heron, 40; white-faced glossy ibis, 451; Canada goose, 8; white-fronted goose, 50; snow goose, 2; mallard, 10; baldpate, 352; pintail, 300; green-winged teal, 3; shoveller, 1; redhead, 1; canvas-back, 1; buffle-head, 1; ruddy duck, 2; turkey vulture, 21; red-tailed hawk, 6; marsh hawk, 8; prairie falcon, 1; sparrow hawk, 9; Gambel's quail, 3; ring-necked pheasant, 3; Virginia rail, 3; sora, 5; Am. coot, 32; mountain plover, 14; killdeer, 32; black-bellied plover, 151; Wilson's snipe, 2; long-billed curlew, 6; spotted sandpiper, 2; willet, 3; greater yellow-legs, 200; lesser yellow-legs, 5; least sandpiper, 350; dowitcher, 250; western sandpiper, 520; marbled godwit, 13; avocet, 76; California gull, 1; ring-billed gull, 4 (1000 gulls unidentified, most likely of this species); mourning dove, 265; road-runner, 3; burrowing owl, 4; red-shafted flicker, 12; black phoebe, 16; Say's phoebe, 13; vermilion flycatcher, 2; horned lark, 11; violet-green swallow, 1; tree swallow, 300; verdin, 5; cactus wren, 6; long-billed marsh wren, 4; mockingbird, 2; crissal thrasher, 2; sage thrasher, 2; mountain bluebird, 104; blue-gray gnatcatcher, 5; plumbeous gnat-catcher, 1; ruby-crowned kinglet, 7; Am. pipit, 700; phainopepla, 7; loggerhead shrike, 115; orange-crowned warbler, 1; Audubon's warbler, 70; yellow-throat, 4; English sparrow, 60; western meadow-lark, 40; yellow-headed blackbird, 5000 (est.); red-wing, 100,000 (11 separate flocks in the air at the same time, all visible from the same point, and a twelfth flock on the ground 50 feet away. The yellow-heads and Brewer's were counted only in the flock on the ground and the larger flocks may have contained yellow-heads and Brewer's also — J. M.); Brewer's blackbird, 50; cowbird, 55; house finch, 19; Am. goldfinch, 2; Arkansas goldfinch, 14; Abert's towhee, 60; Savannah sparrow, 200; lark sparrow, 12; sage sparrow, 2; chipping sparrow, 25; Brewer's sparrow, 2; white-crowned (Gambel's) sparrow, 450; song sparrow, 10 (including 8 desert song sparrows and 2 that were another race — H. L. C.). **Total,** 90 species (1 additional sub-species); about 113,069 individuals. (Hunters were numerous throughout the State Game Refuge and on the Salton Sea borders, therefore the hundreds of thousands of ducks usually seen in this area were largely absent; greatest numbers of ducks were far out at "sea," visible only as specks with 35 power scope and since outside of census area, were not counted.) — Mr. and Mrs. Howard L. Cogswell, William R. Dawson, Ralph Mall, Mr. and Mrs. James Murdock, S. Galen Smith, Dr. Robert L. Taylor.

300. Fresno, Calif. (area 5 miles in diameter at Lane's Bridge on the San Joaquin River, 10 miles north of Fresno, in the San Joaquin Valley and within a few miles of the geographical center of California; exactly same area as in four previous years; open plains 20%, river bottom of San Joaquin and thickets along both river banks and also narrow pond 1 mile in length 80%). — Dec. 22; 7 a.m. to 5 p.m. Clear and still nearly all day; temp. 32° to 60°; slight breeze in p.m. Total hours, 10; total miles, 15 (6 on foot, 9 by car). Pied-billed grebe, 5; great blue heron, 3; Am. egret, 3; snowy egret, 3; green heron, 2; black-crowned night heron, 1; Am. bittern, 2; Canada goose, 90; mallard, 17; cinnamon teal, 1; shoveller, 1; ring-necked duck, 1; ruddy duck, 6; red-tailed hawk, 5; red-shouldered hawk, 2; sparrow hawk, 5; California quail, 45; Virginia rail, 1; Florida gallinule, 11; Am. coot, 55; killdeer, 5; Wilson's snipe, 1; spotted sandpiper, 1; greater yellow-legs, 16; least sand-piper, 53; dowitcher, 4; mourning dove, 20; road-runner, 1; horned owl, 1; belted kingfisher, 3; red-shafted flicker, 41; California woodpecker, 13; yel-low-bellied sapsucker (red-breasted), 3; downy woodpecker, 1; Nuttall's woodpecker, 5; black phoebe, 8; Say's phoebe, 1; horned lark, 5; Cali-fornia jay, 27; Am. crow, 5; plain titmouse, 3; bush-tit, 58; white-breasted nuthatch, 1; wren-tit, 2; house wren, 1; Bewick's wren, 7; long-billed marsh wren, 1; rock wren, 1; mockingbird, 11; California thrasher, 2; robin, 1; varied thrush, 4; hermit thrush, 8; mountain bluebird, 29; ruby-crowned kinglet, 37; Am. pipit, 38; phainopepla, 4; logger-head shrike, 2; orange-crowned warbler, 2; myrtle warbler, 1; Audubon's warbler, 14; English sparrow, 8; western meadowlark, 36; Brewer's blackbird, 199; purple finch, 4; house finch, 34; Am. goldfinch, 15; Arkansas goldfinch, 5; Lawrence's goldfinch, 3; spotted towhee, 14; brown towhee, 3; Savannah sparrow, 12; lark sparrow, 45; Oregon junco, 52; white-crowned sparrow (Gambel's), 120; golden-crowned sparrow, 24; fox sparrow, 1; Lincoln's

sparrow, 1; song sparrow, 13. **Total,** 79 species; 1289 individuals.—W. B. Minturn.

301. Los Angeles, Calif. (same area as in previous 9 years; seashore 10%, marsh 7%, open country 5%, golf courses 2%, canyons, oak wooded 20%, chaparral 14%, river bed 3%, reservoirs 10%, campus and city parks 9%, city suburbs 20%).—Dec. 21; 5:30 a.m. to 5:30 p.m. Cloudy and foggy in early a.m. and late p.m.; midday clear; still to light breezes; temp 60° to 70°; a drizzle on the preceding night dampened but did not wet the area. Forty-five observers in 23 parties. Total hours, 255 (199 on foot, 56 by car). Arctic loon, 3; red-throated loon, 3; horned grebe, 2; eared grebe, 27; western grebe, 260; pied-billed grebe, 86; brown pelican, 61; double-crested cormorant, 32; Brandt's cormorant, 2; pelagic cormorant, 2; great blue heron, 11; green heron, 12; Am. egret, 44; snowy egret, 26; black-crowned night heron, 40; whistling swan, 4 (Silver Lake, first seen, Dec. 16; still there, Dec. 30—C. H. D. *et al.*); mallard, 1; gadwall, 1; baldpate, 123; green-winged teal, 57; pintail, 666; shoveller, 333; ring-necked duck, 51; canvas-back, 18; lesser scaup duck, 272; Am. golden-eye, 3; white-winged scoter, 25; surf scoter, 481; ruddy duck, 297; red-breasted merganser, 59; white-tailed kite, 2; sharp-shinned hawk, 12; Cooper's hawk, 4; red-tailed hawk, 24; marsh hawk, 9; pigeon hawk, 2 (H. L. C., M. G. W.); sparrow hawk, 64; California quail, 120; clapper rail, 3; sora rail, 1; Florida gallinule, 2; Am. coot, 1713; snowy plover, 7; semipalmated plover, 20; killdeer, 316; black-bellied plover, 308; surf-bird, 6; ruddy turnstone, 3; black turnstone, 20; Wilson's snipe, 8; long-billed curlew, 1; Hudsonian curlew, 16; spotted sandpiper, 11; willet, 598; greater yellow-legs, 33; least sandpiper, 288; red-backed sandpiper, 28; black-necked stilt, 4; dowitcher, 340 eastern, 3—W. A. K.; long-billed, 337—W. A. K.); western sandpiper, 172; marbled godwit, 166; sanderling, 294; avocet, 165; glaucous-winged gull, 90; western gull, 69; herring gull, 13; California gull, 825; ring-billed gull, 1648; short-billed gull, 1; Bonaparte's gull, 503; Heermann's gull, 132; Forster's tern, 50; band-tailed pigeon, 12; mourning dove, 348; Chinese spotted dove, 98; ringed turtle dove, 92; road-runner, 1; screech owl, 2; horned owl, 6; burrowing owl, 2; short-eared owl, 1; white-throated swift, 116; Anna's hummingbird, 177; belted kingfisher, 9; red-shafted flicker, 137; California woodpecker, 12; yellow-bellied sapsucker, 5 (red-naped, 1—M. G. W. *et al.;* red-breasted, 4); downy woodpecker, 6; Nuttall's woodpecker, 11; ash-throated flycatcher, 1 (M. G. W.); black phoebe, 159; Say's phoebe, 30; horned lark, 15; California jay, 164; raven, 2 (at U.C.L.A. campus, A. L. B.); Am. crow, 1; mountain chickadee, 3; plain titmouse, 43; bush-tit, 626; red-breasted nuthatch, 7 (1—C. H. D., 6—S. B.); wren-tit, 241; house wren, 14; Bewick's wren, 23; long-billed marsh wren, 2; cañon wren, 1; mockingbird, 110; California thrasher, 56; robin, 311; varied thrush, 1 (R. M.); hermit thrush, 105; western bluebird, 54; blue-gray gnatcatcher, 19; golden-crowned kinglet, 11; ruby-crowned kinglet, 117; Am. pipit, 67; cedar waxwing, 246; loggerhead shrike, 26; Hutton's vireo, 7; orange-crowned warbler, 6; myrtle warbler, 8; Audubon's warbler, 2212; Townsend's warbler, 2; yellow-throat, 13; English sparrow, 435; western meadowlark, 287; red-wing, 30; Brewer's blackbird, 887; cowbird, 3; purple finch, 158; Cassin's purple finch, 8; house finch, 2164; pine siskin, 6 (D. E. G.); Am. goldfinch, 84; green-backed goldfinch, 239; Lawrence's goldfinch, 1; spotted towhee, 82; brown towhee, 465; Savannah sparrow, 108 (including 30 Belding's sparrows and 1 large-billed sparrow); lark sparrow, 3; rufous-crowned sparrow, 11; slate-colored junco, 1 (with Oregons—H. L. C.); Oregon junco, 135; chipping sparrow, 27; white-crowned sparrow, 960; golden-crowned sparrow, 110; fox sparrow, 29; Lincoln's sparrow, 12; song sparrow, 104. **Total,** 149 species (4 additional subspecies); 23,180 individuals.—Louis Anderson, Arthur L. Berry, Stanley Brode, Eva Brothers, Enna Butler, Mr. and Mrs. Lawrence Carter, Mr. and Mrs. H. L. Cogswell, Mr. and Mrs. J. H. Comby, Ruby Curry, Harriet C. Dammert, Caroline H. Daugherty, M. S. Dunlap, Mr. and Mrs. Harlan Eckler, Dorothy Getz, Elizabeth B. Goolden, Laura Greely, Dorothy E. Groner, George T. Hastings, Ann B. Hendy, Bess Hoffman, R. W. Julian, Earl Russel, Justin Russel, Mr. and Mrs. W. A. Kent, Martha A. Lengerman, Ralph Mall, Florine Maule, Ralph McCormack, Enid R. Michael, Dorothy Murray, Mr. and Mrs. C. J. Parker, W. Dan Quattlebaum, Helen Reed, Nellie Spencer, Clara Splitter, C. R. Thomas, May Warrick, Clara S. Weedmark, M. Gertrude Woods (Santa Monica Nature Club, Southwest Bird Study Club, Pasadena Audubon Society, Los Angeles Audubon Society).

302. Malibu, Calif. (Brent's Junction, Tapia Park, Malibu Lake, Russell Valley, Lake Eleanor, Sherwood Lake, Zuma Mesa, seashore from Malibu pier and lagoon west to Point Dume and Zuma Beach, all within 15-mile diameter circle centering 1 mile north of Castro Peak in the Santa Monica Mts., western Los Angeles County; grassy and cultivated fields and weedy roadsides 17%, riparian 23%, oaks 23%, chaparral 2½%, rocky beach 13%, sandy beach 2½%, brackish lagoon 4%, ponds and lakes with marshy borders 15%).—Dec. 26; 7 a.m. to 5 p.m. Clear; wind westerly, 3-10 m.p.h.; temp. about 30° in inland valleys at start, maximum about 80°. Five observers in 2 parties. Total hours, 13; total miles, about 8 on foot, plus numerous short stops during 50+ miles by car within the circle. Red-throated loon, 1; horned grebe, 3; eared grebe, 2; western grebe, 31; pied-billed grebe, 32; brown pelican, 14; double-crested cormorant, 27; Brandt's cormorant, 2+; unidentified cormor-

ants, 55; great blue heron, 4; Am. egret, 3; snowy egret, 1; black-crowned night heron, 1; brant, 1; mallard, 5; gadwall, 2; baldpate, 3; pintail, 67; green-winged teal, 10; shoveller, 116; ring-necked duck, 34; canvas-back, 181; lesser scaup duck, 30; surf scoter, 8; ruddy duck, 386; red-breasted merganser, 2; white-tailed kite, 3; sharp-shinned hawk, 1; Cooper's hawk, 1; red-tailed hawk, 9; red-shouldered hawk, 1; ferruginous rough-leg, 1 (carefully observed with 8X binoculars — C. H.D.); marsh hawk, 2; prairie falcon, 1; pigeon hawk, 1; sparrow hawk, 11; California quail, 61; Am. coot, 403; snowy plover, 63; killdeer, 18; black-bellied plover, 21; Wilson's snipe, 1; Hudsonian curlew, 2; willet, 54; marbled godwit, 21; sanderling, 85; glaucous-winged gull, 4; western gull, 40; herring gull, 1; California gull, 375; ring-billed gull, 18; short-billed gull, 23; Heermann's gull, 41; band-tailed pigeon, 192; mourning dove, 59; barn owl, 1; white-throated swift, 9; Anna's hummingbird, 4; belted kingfisher, 3; red-shafted flicker, 12; California woodpecker, 39; yellow-bellied sapsucker (red-breasted), 1; hairy woodpecker, 1; downy woodpecker, 1; Nuttall's woodpecker, 3; black phoebe, 14; Say's phoebe, 9; California jay, 23; Am. raven, 3; Am. crow, 58; mountain chickadee, 3; plain titmouse, 14; bush-tit, 10; red-breasted nuthatch, 1 (C. H. D. & party; this species in a widespread invasion throughout southern California this year); wren-tit, 21; Bewick's wren, 7; long-billed marsh wren, 2; cañon wren, 2; rock wren, 2; mockingbird, 3; California thrasher, 3; robin, 1; varied thrush, 14; hermit thrush, 7; blue-gray gnatcatcher, 8; ruby-crowned kinglet, 7; loggerhead shrike, 5; Hutton's vireo, 1; orange-crowned warbler, 2; Audubon's warbler, 71; yellow-throat, 2; English sparrow, 2; western meadowlark, 80; red-wing, 6000 (est.); tricolored blackbird, 30; Brewer's blackbird, 2700 (est.); cowbird, 1+; purple finch, 38; house finch, 213; pine siskin, 7; Am. goldfinch, 9; Arkansas goldfinch, 22; spotted towhee, 95; brown towhee, 39; Savannah sparrow, 12; vesper sparrow, 9; lark sparrow, 20; rufous-crowned sparrow, 3; Oregon junco, 41; white-crowned sparrow (mostly Gambel's), 30; golden-crowned sparrow, 59; fox sparrow, 8; Lincoln's sparrow, 3; song sparrow, 32. **Total,** 113 species; approximately 12,354 individuals. — Caroline H. Daugherty, Elizabeth B. Goolden, Gertrude Woods, Howard L. and Bessie Cogswell.

303. Marysville, Calif. (center of town including public parks, 1 mile; woods and river bottoms northwest of town, 2 miles; unimproved portion of Ellis Lake in outlying district within city limits, 1 mile; north 10 miles along irrigated farm lands; east to Camp Beale area (open grasslands), 10 miles; south of town in tules and rice fields, 5 miles; open farm land 60%, town suburbs 10%, deciduous town woodlots 15%, cattail marsh 15%). — Dec. 28; 10 a.m. to 4 p.m.; overcast all day; temp. 42°; visibility poor in a.m., good in p.m.; no wind. Nine observers in 5 parties. Total hours, 45 (10 on foot, 35 in car); total miles, 50 (10 on foot, 40 in car). Pied-billed grebe, 5; great blue heron, 7; Am. egret, 43; green heron, 1; black-crowned night heron, 5; whistling swan, 27; Canada goose, 482; white-fronted goose, 20; mallard, 9; pintail, 4; cinnamon teal, 15; canvas-back, 3; turkey vulture, 2; Cooper's hawk, 2; red-tailed hawk, 2; marsh hawk, 20; duck hawk, 1; pigeon hawk, 2; sparrow hawk, 16; California quail, 8; ring-necked pheasant, 1; sandhill crane, 6; Am. coot, 425; killdeer, 54; mourning dove, 56; barn owl, 4; saw-whet owl, 1; belted kingfisher, 1; red-shafted flicker, 77; California woodpecker, 9; hairy woodpecker, 4 (J.R.B.); downy woodpecker, 5; Nuttall's woodpecker, 2; black phoebe, 2; horned lark, 7; California jay, 10; yellow-billed magpie, 101; Am. crow, 47; plain titmouse, 18; bush-tit, 28; Bewick's wren, 7; mockingbird, 22; robin, 21; hermit thrush, 9 (J.C.R.); Mexican bluebird, 15; mountain bluebird, 50; Am. pipit, 125; cedar waxwing, 10; loggerhead shrike, 13; Hutton's vireo, 19; myrtle warbler, 5; Audubon's warbler, 17; English sparrow, 260; western meadowlark, 306; red-wing, 2105 (est.); Brewer's blackbird, 2691 (est.); house finch, 45; Am. goldfinch, 715; Arkansas goldfinch, 15; spotted towhee, 3; brown towhee, 2; Savannah sparrow, 20; lark sparrow, 170; Oregon junco, 188; white-crowned sparrow, 196; golden-crowned sparrow, 94; song sparrow, 10. **Total,** 67 species; 8665 individuals. — J. C. Ries, J. R. Beeson, Gertrude Cable, Tunia Vandenbout, Lenore Stafford, Bessie Lamberskin, Evelyn Lamberskin, Sara Jane Ries, Charles Ries (Yuba-Sutter Audubon Society).

304. Monterey Peninsula, Calif. (Laguna del Rey; Hotel Del Monte grounds and golf course; El Estero; oak-studded hillside at foot of Jack's Peak; Monterey harbor; Pacific Grove water front to Asilomar beach; Carmel River-mouth lagoon north along water front to Pebble Beach; section of pine-filled canyon at north city limit of Carmel; parts of Carmel village; area in vicinity of intersection of State Highway No. 1 and Carmel Valley road; areas along the latter road to a point 3.3 miles east of intersection; Carmel river bottom brushland at bridge of Highway No. 1; Point Lobos and vicinity. All counts made within a 9¾ mile diameter and only along routes or particular areas indicated; none made during car transportation between places. Bay exposed to ocean 12%, beach 5%, river-mouth lagoon 2%, ponds and tule swamp 18%, rocky shore 8%, open fields 7%, brushland 11%, Monterey pine association 10%, live oaks 5%, golf courses 6%, gardens and village streets 14%, redwood canyon 2%). — Dec. 22; dawn to 2 hours after dusk. Clear; temp. 30° to 60° F.; wind E veering to NW, 0-10 m.p.h.; ground bare. Six observers in 3 parties. Total hours, 26 (all afoot except for 40 min. recording from car); total miles, 18½ (14 on foot, 4½ by car). Common loon, 4; Pacific loon, 4; red-throated loon, 4; horned

grebe, 16; eared grebe, 12; western grebe, 245; pied-billed grebe, 3; brown pelican, 45; Brandt's cormorant, 164; Baird's cormorant, 33; green heron, 1; black-crowned night heron, 1; mallard, 150; baldpate, 4; pintail, 31; green-winged teal, 4; shoveller, 57; redhead, 1; ring-necked duck, 33; Am. golden-eye, 1; white-winged scoter, 37; surf scoter, 428; ruddy duck, 130; red-breasted merganser, 62; Cooper's hawk, 3; red-tailed hawk, 4; red-shouldered hawk, 1; duck hawk, 1; sparrow hawk, 6; California quail, 91; Virginia rail, 2; Am. coot, 257; black oyster-catcher, 5; killdeer, 92; black-bellied plover, 6; surf-bird, 3; black turnstone, 79; Wilson's snipe, 9: spotted sandpiper, 1; willet, 102; least sandpiper, 28; marbled godwit, 1; sanderling, 233; glaucous-winged gull, 118; western gull, 169; herring gull, 21; California gull, 55; ring-billed gull, 13; short-billed gull, 122; Bonaparte's gull, 3; Heermann's gull, 27; marbled murrelet, 1; ancient murrelet, 3; Cassin's auklet, 1; band-tailed pigeon, 86; road-runner, 1; barn owl, 1; saw-whet owl, 1; Anna's hummingbird, 13; belted kingfisher, 4; red-shafted flicker, 50; California woodpecker, 59; hairy woodpecker, 5; downy woodpecker, 1; black phoebe, 12; Say's phoebe, 7; Steller's jay, 5; California jay, 47; yellow-billed magpie, 12; Am. crow, 32; chestnut-backed chickadee, 20; plain titmouse, 7; bush-tit, 120; pygmy nuthatch, 25; brown creeper, 3; wren-tit, 23; house wren, 1; Bewick's wren, 6; long-billed marsh wren, 6; California thrasher, 1; robin, 145; varied thrush, 46; hermit thrush, 27; blue-gray gnatcatcher, 2; ruby-crowned kinglet, 18; Am. pipit, 105; cedar waxwing, 20; loggerhead shrike, 4; Hutton's vireo, 7; Audubon's warbler, 57; Townsend's warbler, 3; yellow-throat, 1; English sparrow, 3; western meadowlark, 51; red-wing, 80; Brewer's blackbird, 324; purple finch, 29; house finch, 359; pine siskin, 2; Arkansas goldfinch, 7; red crossbill, 5; spotted towhee, 8; brown towhee, 3; Savannah sparrow, 2; Oregon junco, 75; white-crowned sparrow, 92; golden-crowned sparrow, 79; white-throated sparrow, 1; fox sparrow, 7; song sparrow, 53. **Total,** 110 species; 5090 individuals. (Seen in area Dec. 23: yellow-bellied (red-breasted) sapsucker.) — Dr. and Mrs. W. A. Angwin, Wilma Cook, Florence Morrow, R. W. Storer, Laidlaw Williams.

305. Oakland, Calif. (Mills College and near vicinity, Leona Heights, Sequoia Park, area adjacent to Skyline Boulevard south of Sequoia Park, Lake Merritt, San Leandro Bay, Bay Farm Island, Berkeley Aquatic Park, southern tip of San Pablo Reservoir, and Saint Mary's College). — Dec. 28; 7:30 a.m. to 5:15 p.m. Tule fog in a.m., clear in p.m.; temp. 36° to 58°. Seven observers working in 2 groups. Total hours, 18¾ (12 afoot, 6¾ by car); total miles 63½ (18½ afoot, 45 by car). Horned grebe, 1; eared grebe, 22; western grebe, 11; pied-billed grebe, 8; double-crested cormorant, 32; great blue heron, 6; Am. Egret, 5; snowy egret, 2; black-crowned night heron, 36; Canada goose, 35; white-fronted goose, 3; mallard, 45; baldpate, 268; pintail, 366; green-winged teal, 33; shoveller, 36; ring-necked duck, 47; canvas-back, 96; scaup duck (sp.), 500 (est.); Am. golden-eye, 15; buffle-head, 6; surf scoter, 55; ruddy duck, 350 (est.); hooded merganser, 5 [no details — Ed.]; Am. merganser, 7; sharp-shinned hawk, 1; red-tailed hawk, 10; pigeon hawk, 1; sparrow hawk, 5; California quail, 11; ring-necked pheasant, 1; California clapper rail, 3; Am. coot, 500 (est.); killdeer, 4; black-bellied plover, 400 (est.); black turnstone, 1; Wilson's snipe, 3; Hudsonian curlew, 16; willet, 400 (est.); greater yellow-legs, 7; least sandpiper, 280; red-backed sandpiper, 128; dowitcher, 94; western sandpiper, 266; marbled godwit, 300 (est.); sanderling, 52; avocet, 500 (est.); glaucous-winged gull, 455; western gull, 500 (est.); herring gull, 75; California gull, 116; ring-billed gull, 4; short-billed gull, 10; Bonaparte's gull, 111; Forster's tern, 5; band-tailed pigeon, 2; mourning dove, 3; burrowing owl, 2; short-eared owl, 1; Anna's hummingbird, 8; red-shafted flicker, 11; California woodpecker, 1; yellow-bellied sapsucker (red-breasted), 1; hairy woodpecker, 1; downy woodpecker, 1; black phoebe, 4; horned lark, 15; Steller's jay, 2; California jay, 9; plain titmouse, 5; bush-tit, 42; red-breasted nuthatch, 7; brown creeper, 1; wren-tit, 8; Bewick's wren, 5; mockingbird, 2; robin, 58; varied thrush, 3; hermit thrush, 11; ruby-crowned kinglet, 8; Am. pipit, 3; cedar waxwing, 3; loggerhead shrike, 1; Hutton's vireo, 4; myrtle warbler, 6; Audubon's warbler, 30; Townsend's warbler, 2; yellow-throat, 1; English sparrow, 43; western meadowlark, 64; red-wing, 40; Brewer's blackbird, 268; California purple finch, 6; house finch, 86; pine siskin, 35; Am. goldfinch, 1; Arkansas goldfinch, 3; red crossbill, 10 (reported elsewhere in the Bay Region.); spotted towhee, 5; brown towhee, 28; Savannah sparrow, 8; rufous-crowned sparrow, 5; Oregon junco, 78; white-crowned sparrow, 35; golden-crowned sparrow, 10; fox sparrow, 4; song sparrow, 17. **Total,** 107 species; approximately 7256 individuals. — Mr. and Mrs. Harry C. Adamson, H. W. Carriger, Leroy L. Jensen, Milton L. Seibert, Russell A. Sieder, Leland L. Stallcup.

306. Oceanside-Carlsbad, Calif. (Lt. Maxton Brown Bird Refuge and vicinity, within 15-mile diameter; salt marsh 85%, seashore 10%, open fields 5%). — Dec. 28; 9 a.m. to 4:20 p.m. Fair; temp. 62° to 75° F.; wind NE veering to SSW, from less than 1 to 7 m.p.h. Six observers together. Total hours, 7¼ (6½ afoot, ¾ by car); total miles, 29 (4 afoot, 25 by car). Eared grebe, 1; western grebe, 1; pied-billed grebe, 3; double-crested cormorant, 2; Am. egret, 24; snowy egret, 39; green heron, 1; white-faced glossy ibis, 5 (one seen singly and four in a flock through 6X glasses — M. M.); snow goose, 2; baldpate, 50; pintail, 147; green-winged teal, 12; blue-winged teal, 2; shoveller, 1500; canvas-back, 2; lesser scaup, 5; marsh hawk, 2; sparrow hawk, 5; Am. coot, 201; killdeer, 17; long-billed

curlew, 1; Hudsonian curlew, 3; spotted sandpiper, 1; willet, 2; lesser yellow-legs, 3; least sandpiper, 3; red-backed sandpiper, 4; western sandpiper, 52; marbled godwit, 1; sanderling, 100; avocet, 19; western gull, 25; California gull, 50; ring-billed gull, 5; Forster's tern, 1; mourning dove, 23; Anna's hummingbird, 1; belted kingfisher, 1; red-shafted flicker, 1; Cassin's kingbird, 4; black phoebe, 3; tree swallow, 1; California jay, 2; bush-tit, 30; long-billed marsh wren, 5; mockingbird, 8; blue-gray gnatcatcher, 2; cedar waxwing, 1; loggerhead shrike, 2; Audubon's warbler, 6; yellow-throat, 1; English sparrow, 10; western meadowlark, 2; red-wing, 14; Brewer's blackbird, 30; house finch, 105; Arkansas goldfinch, 15; Savannah sparrow (Belding's), 5; white-crowned sparrow (Gambel's), 5; song sparrow, 1. **Total,** 60 species; 2569 individuals.—Mabel G. Whiting, Mrs. Edith W. Thatcher, Priscilla Allen, Harry A. Musser, Everett Thatcher, Marjorie Moody (Orange County Bird Club).

307. Orange County (coastal), Calif. (Seal Beach, Huntington Beach, Newport Beach, Back Bay area inland 2½ miles; all within 15-mile diameter; urban 5%, salt marsh and lagoons 50%, cultivated 15%, open grassland on low rolling hills 30%). — Dec. 28; 7:30 a.m. to 4:30 p.m. Clear; temp. 50° to 70° F.; wind S, 1-7 m.p.h. Five observers together. Total hours, 9 (6 afoot, 3 by car); total miles 49 (5 afoot, 44 by car). Eared grebe, 8; western grebe, 4; pied-billed grebe, 7; brown pelican, 10; great blue heron, 4; Am. egret, 38; snowy egret, 25; shoveller, 47; lesser scaup duck, 1; red-breasted merganser, 11; white-tailed kite, 3; red-tailed hawk, 5; marsh hawk, 3; sparrow hawk, 5; Am. coot, 81; snowy plover, 1; killdeer, 1; black-bellied plover, 17; long-billed curlew, 2; Hudsonian curlew, 2; spotted sandpiper, 1; willet, 256; greater yellow-legs, 2; lesser yellow-legs, 6; least sandpiper, 850 (est.); western sandpiper, 750 (est.); marbled godwit, 297; sanderling, 3; avocet, 158; western gull, 132; California gull, 261; ring-billed gull, 135 (about 500 gulls, either California or ring-billed, were seen too far away to be identified); Forster's tern, 26; mourning dove, 1; road-runner, 1; Anna's hummingbird, 4; belted kingfisher, 1; red-shafted flicker, 1; black phoebe, 3; Say's phoebe, 8; horned lark, 50; tree swallow, 6; Am. crow, 1; wren-tit, 5; house wren, 2; Bewick's wren, 1; mockingbird, 1; robin, 6; hermit thrush, 1; mountain bluebird, 9; blue-gray gnatcatcher, 3; ruby-crowned kinglet, 5; Am. pipit, 57; cedar waxwing, 20; loggerhead shrike, 13; Audubon's warbler, 15; yellow-throat, 7; English sparrow, 16; western meadowlark, 35; red-wing, 7; Brewer's blackbird, 70; house finch, 208; Am. goldfinch, 4; Arkansas goldfinch, 12; brown towhee, 2; Savannah sparrow, 31 (Belding's 3); white-crowned sparrow (Gambel's), 50; song sparrow, 12. **Total,** 68 species (1 additional subspecies); about 4320 individuals. Due to open hunting season many water birds which had been observed within the previous week were missing. — Vanche Etoile Plumb, Florence Hullsiek, Fern Zimmerman, Alice Zimmerman, Arnold Lane (Orange County Bird Club).

308. Orange County (northeastern), Calif. (Irvine Park, Irvine Lake, Peter's Canyon, Bixby Botanical Gardens in Santa Ana Canyon, within 15-mile diameter; cultivated areas 5%, foothills 55%, mountains 40%). — Dec. 28; 7:45 a.m. to 4:45 p.m. Fair; temp. 62° to 80° F.; wind, 4-8 m.p.h. Observers together. Total hours, 8 (5 afoot, 3 by car); total miles, 48 (7 afoot, 41 by car). Great blue heron, 1; Am. egret, 1; black-crowned night heron, 1; mallard, 25; European widgeon, 2 [no details — Ed.] pintail, 1; ruddy duck, 3; turkey vulture, 1; red-tailed hawk, 1; ferruginous rough-leg, 1; marsh hawk, 1; sparrow hawk, 6; California quail, 3; Am. coot, 100; western sandpiper, 12; mourning dove, 5; road-runner, 2; Anna's hummingbird, 3; red-shafted flicker, 5; California woodpecker, 12; black phoebe, 4; Say's phoebe, 8; California jay, 15; Am. raven, 2; plain titmouse, 2; bush-tit, 15; wren-tit, 4; cactus wren, 1; mockingbird, 4; robin, 14; hermit thrush, 17; mountain bluebird, 4; ruby-crowned kinglet, 3; loggerhead shrike, 1; orange-crowned warbler, 1; Audubon's warbler, 75; western meadowlark, 7; Brewer's blackbird, 1; purple finch, 2; house finch, 8; Arkansas goldfinch, 7; spotted towhee, 5; brown towhee, 13; Oregon junco, 18; white-crowned sparrow (Gambel's), 5; song sparrow, 4. **Total,** 46 species; about 426 individuals. — Mr. and Mrs. Eric E. Eastman, Mrs. Francis Hart, Mrs. Margaret Harding (Orange County Bird Club).

309. Palo Alto, Calif. (8 miles to east side of south San Francisco Bay over Dumbarton Bridge, 8 miles through Stanford University Campus and foothills of Santa Cruz Mountains; all territory within 7½-mile radius of center of Palo Alto. Tidal salt marsh 20%, exposed mud flats 5%, open salt water 20%, eucalyptus and live oak groves 15%, lawns 5%, shrubbery 5%, conifer and deciduous trees 10%, open fields and small lake 20%). — Dec. 21; broken clouds with occasional bright sun; no wind; temp. 40° to 70° to 50°. Total hours, 10; total miles, 16 (on foot). Horned grebe, 1; eared grebe, 200; western grebe, 50; pied-billed grebe, 18; white pelican, 1; double-crested cormorant, 500; great blue heron, 6; Am. egret, 10; snowy egret, 3; black-crowned night heron, 2; whistling swan, 2; mallard, 18; pintail, 80; green-winged teal, 5; shoveller, 700; redhead, 2; ring-necked duck, 15; canvas-back, 60; scaup duck [sp.], 300; Am. golden-eye, 20; buffle-head, 25; surf scoter, 11; ruddy duck, 18; Am. merganser, 22; red-breasted merganser, 9; Cooper's hawk, 2; red-tailed hawk, 1; marsh hawk, 1; duck hawk, 1; sparrow hawk, 6; California quail, 16; California clapper rail, 6; Am. coot, 200; killdeer, 50; black-bellied plover, 6; long-billed curlew, 3; Hudsonian curlew, 1; spotted sandpiper, 1; willet, 350; greater yellow-legs, 6; least sandpiper, 200; red-backed sandpiper, 150; marbled godwit,

12; avocet, 150; northern phalarope, 2 [late date; no details — Ed.]; glaucous-winged gull, 1; herring gull, 3; California gull, 4; ring-billed gull, 50; Bonaparte's gull, 24; Forster's tern, 4; barn owl, 1 (heard); short-eared owl, 2; Anna's hummingbird, 25; belted kingfisher, 1; red-shafted flicker, 20; California woodpecker, 18; downy woodpecker, 1; black phoebe, 6; Steller's jay, 1; California jay, 15; chestnut-backed chickadee, 1; plain titmouse, 14; bush-tit, 18; white-breasted nuthatch, 6; wren-tit, 3; mockingbird, 2; California thrasher, 2; robin, 600; varied thrush, 4; hermit thrush, 4; Mexican bluebird, 5; ruby-crowned kinglet, 10; Am. pipit, 25; cedar waxwing, 24; Audubon's warbler, 15; Townsend's warbler, 1; yellow-throat, 3; western meadowlark, 40; red-wing, 40; Brewer's blackbird, 200; purple finch, 2; house finch, 30; pine siskin, 28; Arkansas goldfinch, 2; spotted towhee, 3; brown towhee, 25; Savannah sparrow, 6; Oregon junco, 40; white-crowned sparrow, 50; golden-crowned sparrow, 30; song sparrow, 8. **Total,** 92 species; approximately 4659 individuals. — James P. Rigby.

310. Pasadena, Calif. (portions of a 15-mile diameter circle centering at San Gabriel Blvd. and Lorain Rd. on the San Gabriel-San Marino boundary and extending through the western San Gabriel Valley to San Gabriel River Wildlife Sanctuary and San Jose Creek on the southeast, to Duarte on the northeast, including the summit and southerly slopes of Mt. Wilson in the San Gabriel Mountains above Pasadena, and northwest through Pasadena to Oak Grove Park, west to Eagle Rock, and southwest to Lincoln Park, Los Angeles; ponds 4½%, marshes 2½%, fields and roadsides 12%, river bed 2½%, river-bottom woodland 15%, live oak and sycamore woodland 21%, canyon riparian 4½%, chaparral 18%, pine-oak forest 2½%, city parks and residential areas 17½%). — Dec. 27; 4:30 a.m. to 5 p.m. plus intermittent "owling" from midnight to midnight. Clear; temp rising to an unseasonable 85° in mid-day; wind very slight; birds very inactive after early morning hours. Twenty-six observers in 13 parties. Total hours, 88½; total miles, about 62 (excluding transportation between stops). Eared grebe, 1; pied-billed grebe, 15; great blue heron, 23; Am. egret, 59; snowy egret, 84; green heron, 9; black-crowned night heron, 28; Am. bittern, 4; mallard, 2; baldpate, 25; pintail, 2; green-winged teal, 1; cinnamon teal, 5; shoveller, 21; wood duck, 1; redhead, 2; ring-necked duck, 4; canvas-back, 1; lesser scaup duck, 32; ruddy duck, 5; turkey vulture, 9; white-tailed kite, 2; sharp-shinned hawk, 4; Cooper's hawk, 2; red-tailed hawk, 8; red-shouldered hawk, 4+; prairie falcon, 2; pigeon hawk, 3; sparrow hawk, 37; California quail, 41; mountain quail, 12; Florida gallinule, 1; coot, 281; killdeer, 57; Wilson's snipe, 17; greater yellow-legs, 33; least sandpiper, 275 (est.); California gull, 10+; ring-billed gull, 125+; unidentified gulls (either California or ring-billed), 215 (est.); band-tailed pigeon, 115; mourning dove, 193; Chinese spotted dove, 90; road-runner, 2; barn owl, 2; screech owl, 2; horned owl, 4; poor-will, 1 (heard calling distinctly and for some time just before dawn in deep canyon below summit of Mt. Wilson — R. L. T., R. M.); white-throated swift, 8; Anna's hummingbird, 44; belted kingfisher, 6; red-shafted flicker, 101; California woodpecker, 68; Lewis's woodpecker, 4; yellow-bellied sapsucker (red-breasted), 3; hairy woodpecker, 2; downy woodpecker, 5; Nuttall's woodpecker, 6; Cassin's kingbird, 2; ash-throated flycatcher, 1 (perched bird observed carefully & field marks checked with Peterson's "Field Guide" — R. Truman); black phoebe, 61; Say's phoebe, 11; horned lark, 170 (est.); Steller's jay, 18; California jay, 151; Am. crow, 200 (est.); mountain chickadee, 20; plain titmouse, 75; bush-tit, 498 (partly est.); white-breasted nuthatch, 4; red-breasted nuthatch, 1 (in Eagle Rock area — R. C.); wren-tit, 104; dipper, 2; house wren, 3; Bewick's wren, 28; long-billed marsh wren, 16; cañon wren, 9; rock wren, 2; mockingbird, 95; California thrasher, 24; robin, 600 (est.); hermit thrush, 65; Mexican bluebird, 23; mountain bluebird, 36; blue-gray gnatcatcher, 16; ruby-crowned kinglet, 101; Am. pipit, 41; cedar waxwing, 345 (partly est.); loggerhead shrike, 27; Hutton's vireo, 6; orange-crowned warbler, 6; Audubon's warbler, 793 (partly est.); Townsend's warbler, 3; yellow-throat, 30; black-capped warbler, 2; English sparrow, 67; western meadowlark, 309; red-wing, 204 (partly est.); Brewer's blackbird, 2272 (partly est.); cowbird, 36; cardinal, 15; purple finch, 123; Cassin's finch, 9; house finch, 499; Am. goldfinch, 82; Arkansas goldfinch, 106; Lawrence's goldfinch, 2; spotted towhee, 79; brown towhee, 228; Savannah sparrow, 91; lark sparrow, 22; Oregon junco, 171; chipping sparrow, 3; white-crowned sparrow, 380; golden-crowned sparrow, 43; fox sparrow, 6; Lincoln's sparrow, 15; song sparrow, 103. **Total,** 117 species; about 10,572 individuals. (Recorded in area, but missed on count day: Dec. 24, Virginia and sora rail; Dec. 25, ring-necked pheasant, pine siskin.) — Constance and Genevieve Berry, Wynona Clements, Howard L. Cogswell, Mr. and Mrs. J. H. Comby, Ruby Curry, Donald Grable, Martha A. Lengeman, Evarts A. Loomis, Ralph Mall, Mr. and Mrs. James Murdock, Enid Michael, Mr. and Mrs. C. J. Parker, Helen Pratt, Dr. and Mrs. Guthrie R. Price, Ruth Price, W. D. Quattlebaum, S. Galen Smith, Robert L. Taylor, Rolland Truman, Gertrude and Jo Ann Woods.

311. Salinas (Monterey Co.), Calif. (Salinas, along Salinas River, out Reservation Rd., north to Moss Landing; approximately same area covered in preceding 3 years within 15-mile diameter; willows 30%, open country 25%, slough 35%, ocean beach 5%, home neighborhood 5%). — Dec. 21; 7:30 a.m. to 5 p.m. Clear except for local heavy fog at Moss Landing; temp. 40° to 61°; no wind. Observers together. Total hours, 10; total miles 25 (7 on foot, 18 by car). Pacific loon, 1; Holboell's

grebe, 29 [unusually large concentration — Ed.]; horned grebe, 10; eared grebe, 18; western grebe, 14; pied-billed grebe, 14; white pelican, 42; brown pelican, 150; double-crested cormorant, 60; great blue heron, 6; Am. egret, 4; snow egret, 5; black-crowned night heron, 35; whistling swan, 42; mallard, 4; baldpate, 4; pintail, 200; green-winged teal, 14; cinnamon teal, 34; shoveller, 330; ring-necked duck, 25; canvas-back, 59; lesser scaup duck, 15; Am. golden-eye, 8; old-squaw, 1; white-winged scoter, 7; surf scoter, 3; ruddy duck, 162; hooded merganser, 7 (not observed on previous years but hooded mergansers have been seen on the slough since Nov. 15 this year); red-breasted merganser, 8; white-tailed kite, 2; sharp-shinned hawk, 1; red-tailed hawk, 2; Swainson's hawk, 2 (seen often around the same location and do not object to observation; the under part of the wings and the tail are light); marsh hawk, 5; sparrow hawk, 4; Am. coot, 300; snowy plover, 3; killdeer, 20; black-bellied plover, 20; Wilson's snipe, 1; long-billed curlew, 46; Hudsonian curlew, 8; willet, 110; greater yellow-legs, 1; Baird's sandpiper, 25; least sandpiper, 18; red-backed sandpiper, 7; dowitcher, 6; western sandpiper, 12; marbled godwit, 40; sanderling, 58; avocet, 53; glaucous gull, 3 (very light, primaries unmarked; very seldom seen at Moss Landing — C. A., V. A.); glaucous-winged gull, 8; western gull, 32; herring gull, 7; California gull, 60; ring-billed gull, 32; Bonaparte's gull, 2; Anna's hummingbird, 5; belted kingfisher, 4; red-shafted flicker, 6; California woodpecker, 10; black phoebe, 4; Say's phoebe, 3; California jay, 7; yellow-billed magpie, 13; Am. crow, 86; chestnut-backed chickadee, 15; plain titmouse, 3; bush-tit, 30; wren-tit, 4; house wren, 2; Bewick's wren, 8; cañon wren, 1; mockingbird, 1 (a mockingbird visits our neighborhood each year from about Thanksgiving through Jan.); California thrasher, 1; robin, 25; hermit thrush, 2; Mexican bluebird, 11; blue-gray gnatcatcher, 1; ruby-crowned kinglet, 9; Am. pipit, 12; cedar waxwing, 19; loggerhead shrike, 6; myrtle warbler, 3; Audubon's warbler, 78; Townsend's warbler, 2; English sparrow, 10; western meadow-lark, 65; red-wing, 530; Brewer's blackbird, 160; house finch, 375; purple finch, 2; Am. goldfinch, 86; Arkansas goldfinch, 5; spotted towhee, 4; brown towhee, 6; Savannah sparrow, 12; Oregon junco, 24; white-crowned sparrow, 347; golden-crowned sparrow, 107; fox sparrow, 2; song sparrow, 7. **Total,** 105 species; about 4312 individuals. (Local fog over the best portion of the slough at Moss Landing concealed birds usually found there, and noticeably diminished the count for that section. Birds seen regularly in that area throughout the month of December, but hidden by the heavy fog on Dec. 21: common loon, buffle-head, gadwall, redhead, and on occasions a Forster's tern.) — Charles Anderson, Viola Anderson.

312. San Diego, Calif. (San Diego to Sweetwater Reservoir). — Dec. 22; 7 a.m. to 5 p.m. High thin clouds; wind 4-5 m.p.h.; average temp. 59° F. Four observers in 2 parties. Total hours afield, 11; total party-miles, 96 (8 by motor boat; 82 by car; 6 on foot). Common loon, 4; Pacific loon, 3; horned grebe, 13; eared grebe, 5; western grebe, 45; pied-billed grebe, 6; sooty shearwater, 2; black-vented shearwater, 2; brown pelican, 273; double-crested cormorant, 70; Brandt's cormorant, 1500; Baird's cormorant, 5; great blue heron, 9; Am. egret, 22; snowy egret, 12; black-crowned night heron, 4; brant, 2500; baldpate, 2000; pintail, 2300; shoveller, 1100; canvas-back, 1; lesser scaup, 350; buffle-head, 55; surf-scoter, 40; ruddy duck, 6; Am. merganser, 3; red-breasted merganser, 1; sharp-shinned hawk, 1; Cooper's hawk, 3; red-tailed hawk, 4; marsh hawk, 1; duck hawk, 1; pigeon hawk, 1; sparrow hawk, 10; California quail, 20; clapper rail, 3; sora, 3; Am. coot, 780; semipalmated plover, 3; killdeer, 52; black-bellied plover, 110; ruddy turnstone, 5; black turnstone, 14; Wilson's snipe, 1; long-billed curlew, 27; Hudsonian curlew, 7; spotted sandpiper, 5; willet, 1000; greater yellow-legs, 16; least sandpiper, 360; red-backed sandpiper, 6; dowitcher, 80; western sandpiper, 462; marbled godwit, 850; sanderling, 23; avocet, 111, glaucous-winged gull, 15; western gull, 600; herring gull, 35; California gull, 500; ring-billed gull, 700; Heermann's gull, 160; Forster's tern, 2; royal tern, 30; Caspian tern, 7; mourning dove, 74; barn owl, 2; burrowing owl, 1; short-eared owl, 2; white-throated swift, 100; Anna's hummingbird, 5; belted kingfisher, 2; red-shafted flicker, 6; California woodpecker, 4; yellow-bellied sapsucker (red-breasted), 1; Nuttall's woodpecker, 1; Cassin's kingbird, 4; black phoebe, 5; Say's phoebe, 4; horned lark, 20; tree swallow, 52; California jay, 6; bush-tit, 10; red-breasted nuthatch, 1; wren-tit, 1; long-billed marsh wren, 1; mocking-bird, 21; California thrasher, 1; robin, 4; varied thrush, 1; hermit thrush, 3; mountain bluebird, 1; blue-gray gnatcatcher, 4; plumbeous gnatcatcher, 4; ruby-crowned kinglet, 3; Am. pipit, 40; loggerhead shrike, 20; Hutton's vireo, 1; orange-crowned warbler, 3; Audubon's warbler, 170; yellow-throat, 6; English sparrow, 40; western meadowlark, 44; red-wing, 300; Brewer's blackbird, 275; cowbird, 100; purple finch, 5; house finch, 453; Arkansas gold-finch, 1; spotted towhee, 3; brown towhee, 7; Savannah sparrow, 77 (Belding's, 33; large-billed, 20); vesper sparrow, 4; lark sparrow, 1; rufous-crowned sparrow, 2; white-crowned sparrow (Gambel's), 160; golden-crowned sparrow, 1; fox sparrow, 3; Lincoln's sparrow, 2; song sparrow, 7. **Total,** 120 species (2 additional subspecies); approximately 18,408 individuals. — Laurence M. Huey, Charles F. Harbison, Karl W. Kenyon, Eugene W. Hill.

313. San Francisco, Calif. (Marina, Yacht-harbor, and Palace of Fine Arts Lagoon, Laurel Hill Cemetery, Mountain Lake, Lincoln Park, Lands End, Sutro Heights, Seal Rocks, Ocean

Beach, Golden Gate Park, Stren Grove, Mt. Davidson, Twin Peaks, Blue Mt., Hunters Point, Bay Shore and Park, McLauren Park); ocean beach 8%, bay shore (with salt marsh and mud flats) 6%, parks 60%, fresh water ponds and marsh 12%, open fields 8%, chaparral 6%). — Dec. 21; heavy mist 1½ hours, balance clearing; temp. 45° to 65°; wind variable, 0-4 m.p.h. Twenty-three observers in 7 parties; total hours, 96 (3 hrs. by car); total miles, 52 (49 on foot, 3 by car). Common loon, 1; eared grebe, 7; western grebe, 194; pied-billed grebe, 21; brown pelican, 80; double-crested cormorant, 324; Baird's cormorant, 1; great blue heron, 4; Am. egret, 8; black-crowned night heron, 1; mallard, 656; baldpate, 134; pintail, 1; shoveller, 21; wood duck, 2; redhead, 4; ring-necked duck, 88; canvasback, 92; scaup duck, 1527; Am. golden-eye, 25+; white-winged scoter, 1; surf scoter, 316; ruddy duck, 270+; sharp-shinned hawk, 3; red-tailed hawk, 2; pigeon hawk, 1; sparrow hawk, 12; California quail, 221; Am. coot, 384; snowy plover, 2; killdeer, 45; surf-bird, 6; black turnstone, 17; willet, 7; least sandpiper, 43; sanderling, 158+; glaucous-winged gull, 403+; western gull, 862+; herring gull, 306; California gull, 358+; ring-billed gull, 243+; short-billed gull, 740+; Bonaparte's gull, 500+; Heermann's gull, 2; Ann's hummingbird, 81; belted kingfisher, 2; red-shafted flicker, 113; California woodpecker, 1; downy woodpecker, 2; black phoebe, 28; Say's phoebe, 1; horned lark, 21; California jay, 4; Am. raven, 2; chestnut-backed chickadee, 147; plain titmouse, 3; bush-tit, 97+; red-breasted nuthatch, 123; brown creeper, 8; winter wren, 2; Bewick's wren, 1; robin, 435; varied thrush, 9; hermit thrush, 32; ruby-crowned kinglet, 52; Am. pipit, 14; cedar waxwing, 5; loggerhead shrike, 10; Hutton's vireo, 2; Audubon's warbler, 102; Townsend's warbler, 11; yellow-throat, 4; English sparrow, 322; western meadowlark, 116; Brewer's blackbird, 222; purple finch, 5; house finch, 227; pine siskin, 85; Arkansas goldfinch, 1; spotted towhee, 34; Oregon junco, 197; Savannah sparrow, 6; white-crowned sparrow (subspecies not separated), 720; golden-crowned sparrow, 38; fox sparrow, 21; song sparrow, 84. **Total,** 86 species; 11,483 individuals. Due to a misunderstanding, Lake Merced and Fleishacker Zoo territory was not covered as in previous years. — Mrs. Sadie Bozant, Vee Curtis, Ethel Richardson, Junea Kelly, E. Kilham, Hazel Leffler, Laura Stephens, Miss Frances Blake, Ivander McIver, Margaret Milwain, Mary Sterne, Jacqueline Watkins, Jean Fay, Walter Bradley, Jack Heyneman, George Kilham, Herman Leffler, Edward Mayers, Arthur Myer, Harold Peterson, T. Eric Reynolds, Mrs. B. Wise Neilsen, George Neilsen (Audubon Association of the Pacific).

314. Yosemite Valley, Yosemite National Park, Calif. (Mirror Lake, 4000 ft. elevation, to El Portal, 2000 ft. elevation; 15 miles distance). — Dec. 27; 7:15 a.m. to 5 p.m. Clear, sunny, no wind; min. temp. 51°, max. 55°. Eleven observers in 5 parties. Total miles, 31 (afoot); total hours, 23 (afoot). Mallard, 2; red-tailed hawk, 2; pigmy owl, 2; belted kingfisher, 10; red-shafted flicker, 5; pileated woodpecker, 2; California woodpecker, 40; yellow-bellied sapsucker, 1; hairy woodpecker, 10; white-headed woodpecker, 3; Steller's jay, 108 (est.); California jay, 5; mountain chickadee, 38; plain titmouse, 3; red-breasted nuthatch, 3; brown creeper, 14; dipper, 9; winter wren, 2; cañon wren, 6; robin, 2; varied thrush, 1; Mexican bluebird, 19; Townsend's solitaire, 1; golden-crowned kinglet, 42 (est.); ruby-crowned kinglet, 10; purple finch, 6; Cassin's finch, 4; pine siskin, 12 (est.); spotted towhee, 4; brown towhee, 8; Oregon junco, 39; song sparrow, 1. **Total,** 32 species; approximately 414 individuals. — Verlyn Baysinger, Grace Ewing, Mr. and Mrs. Walter J. Fitzpatrick, Margery Kennedy, Ruth K. Knowles, Sally Plumb, Bona May McHenry, Bruce McHenry, Harry C. Parker, Katharine J. Parker.

Summary of Largest Counts of Individuals

Robert E. Stewart

The total number of species reported in the Christmas bird counts this year was 415, plus a few others which are somewhat questionable. As would be expected the higher counts of individuals for most of these were made either in the southern states or on the Pacific coast, regions that are characterized by mild climates. California led all other states in reporting the highest counts of individuals for 98 species. This state was followed by Texas, Florida and Arizona with highest counts of individuals for 61, 44 and 35 species, respectively. The highest counts of individuals for 55 out of the 61 species from Texas were reported from Harlingen, Texas, which led all other censuses by a wide margin.

On the basis of the Christmas count totals, certain areas of concentration for many of the natural groups of birds are indicated. Some of these are listed as follows:

Loons, grebes, cormorants. — Atlantic, Pacific and Gulf coastal areas.

Herons and ibises. — California and Florida.

Ducks, geese and swans. — Coastal areas; diving ducks being more numerous on Atlantic coast than elsewhere.

Hawks. — Southern states; especially numerous in Texas.

Shorebirds. — California and Florida.

Gulls. — Pacific coast, Great Lakes region and along coast of northeastern states.

Terns. — South Atlantic and Gulf coasts.

Flycatchers. — California, Texas and Florida.

Wrens, thrashers, thrushes and icterids. — Southern third of U. S.

Kinglets. — Northwestern states.

Vireos and warblers. — Florida, Texas, Arizona and California.

Finches, sparrows. — Widespread.

The highest counts of individuals for the various species, together with the locations are listed below (in case of ties, only names of states are given):

Common loon, 109 (*Fla.*, St. Petersburg); Arctic loon, 4 (*Calif.*, Monterey Peninsula); red-throated loon, 113 (*N. J.*, Cape May); Holboell's grebe, 29 (*Calif.*, Salinas); horned grebe, 92 (*Ala.*, Foley); eared grebe, 1000 (*Calif.*, Calipatria); least grebe, 46 (*Tex.*, Harlingen); western grebe, 419 (*Wash.*, Seattle); pied-billed grebe, 218 (*La.*, St. Francisville); sooty shearwater, 2 (*Calif.*, San Diego); black-vented shearwater, 2 (*Calif.*, San Diego); white pelican, 335 (*Tex.*, Harlingen); brown pelican, 794 (*Fla.*, St. Petersburg); gannet, 3000 (*N. C.*, Pea Island); European cormorant, 350 (*R. I.*, Tiverton); double-crested cormorant, 1227 (*Fla.*, St. Petersburg); Mexican cormorant, 97 (*Tex.*, Harlingen); Brandt's cormorant, 1500 (*Calif.*, San Diego); pelagic cormorant, 33 (*Calif.*, Monterey Peninsula); water-turkey, 42 (*Tex.*, Harlingen); great blue heron, 57 (*Okla.*, Salt Plains Nat'l Wildlife Refuge); Am. egret, 413 (*Fla.*, Monroe); snowy egret, 178 (*Calif.*, Calipatria); reddish egret, 1 (*Fla.*, St. Petersburg); Louisiana heron, 98 (*Fla.*, Myakka River State Park); little blue heron, 327 (*Fla.*, Monroe); green heron, 12 (*Calif.*, Los Angeles); black-crowned night heron, 112 (*Ariz.*, Imperial Nat'l Wildlife Refuge); yellow-crowned night heron, 8 (*Fla.*, Monroe); Am. bittern, 4 (*Calif.*, *N. C.*, *N. Y.*); least bittern, 1 (*Tex.*, Harlingen); wood ibis, 500 (*Fla.*, Monroe); white-faced glossy ibis, 451 (*Calif.*, Calipatria); white ibis, 291 (*Fla.*, Myakka River State Park).

Mute swan, 22 (*N. Y.*, Hampton Bays to Bridgehampton, L. I.); whistling swan, 500 (*N. C.*, New Holland); Canada goose, 15,000 (*N. C.*, New Holland); brant, 3730 (*Md.*, southeastern Worcester Co.); white-fronted goose, 50 (*Calif.*, Calipatria); snow goose, 18,000 (*Va.*, Back Bay Nat'l Wildlife Refuge); blue goose, 10 (*Va.*, Back Bay Nat'l Wildlife Refuge); fulvous tree duck, 26 (*Tex.*, Harlingen); mallard, 200,000 (*Ill.*, Brussels); black duck, 10,000 (*Pa.*, Glenolden); mottled duck, 27 (*Fla.*, St. Petersburg); gadwall, 219 (*S. C.*, Charleston); European widgeon, 3 (*N. Y.*, southern Nassau Co.); baldpate, 10,000 (*Va.*, Back Bay Nat'l Wildlife Refuge); pintail, 15,000 (*Pa.*, Glenolden); green-winged teal, 5010 (*Oreg.*, Portland); blue-winged teal, 42 (*S. C.*, Charleston); cinnamon teal, 34 (*Calif.*, Salinas); shoveller, 1500 (*Calif.*, Oceanside-Carlsbad); wood duck, 40 (*Ga.*, Okefenokee Nat'l Wildlife Refuge); redhead, 10,000 (*Va.*, Back Bay Nat'l Wildlife Refuge); ring-necked duck, 5000 (*Va.*, Back Bay Nat'l Wildlife Refuge); canvas-back, 43,870 (*Md.*, Susquehanna Flats — Sassafrass River); scaup duck (sp.), 15,000 (*N.Y.*-2, *Va.*); Am. golden-eye, 2561 (*N. Y.*, Buffalo); Barrow's golden-eye, 2 (*Wash.*, Seattle); buffle-head, 642 (*Md.*, southeastern Worcester Co.); old-squaw, 3900 (*Mass.*, at sea off Monomoy Point); harlequin duck, 8 (*Wash.*, Seattle); Am. eider, 300,000 (*Mass.*, at sea off Monomoy Point); king eider, 3 (*R. I.*, Tiverton); white-winged scoter, 4000 (*Mass.*, at sea off Monomoy Point); surf scoter, 428 (*Calif.*, Berkeley); Am. scoter, 400 (*Mass.*, at sea off Monomoy Point); ruddy duck, 6020 (*La.*, St. Francisville); hooded merganser, 183 (*Miss.*, Moon Lake); Am. merganser, 1500 (*Ont.*, Hamilton); red-breasted merganser, 2850 (*Ala.*, Foley).

Turkey vulture, 476 (*Del.*, Bombay Hook Nat'l Wildlife Refuge); black vulture, 306 (*S. C.*, Columbia); white-tailed kite, 3 (*Calif.*-2); goshawk, 2 (*Ohio, Ont., Pa.*); sharp-shinned hawk, 12 (*Calif.*, Los Angeles); Cooper's hawk, 10 (*Tex.*, Harlingen); red-tailed hawk, 45 (*Tex.*, Houston); Harlan's hawk, 2 (*Tex.*, Harlingen); red-shouldered hawk, 22 (*Tex.*, Harlingen); white-tailed hawk, 1 (*Tex.*, Harlingen); Am. rough-legged hawk, 12 (*Utah*, Bear River Nat'l Wildlife Refuge); ferruginous rough-leg, 3 (*Utah*, Salt Lake City); Harris's hawk, 16 (*Tex.*, Harlingen); golden eagle, 8 (*N. Dak.*, Lower Souris Nat'l Wildlife Refuge); bald eagle, 27 (*Fla., Ill.*); marsh hawk, 110 (*N. J.*, Cape May); osprey, 1 (*N. J., Md., Oreg.*); Audubon's caracara, 8 (*Tex.*, Harlingen); prairie falcon, 3 (*Nebr.*, *Utah*); duck hawk, 3 (*Ala., Tex.*); pigeon hawk, 3 (*Calif., Tex.*); sparrow hawk, 79 (*Del.*, Bombay Hook Nat'l Wildlife Refuge); chachalaca, 10 (*Tex.*, Harlingen); blue grouse, 1 (*Utah*, Ogden); ruffed grouse, 25 (*Mass.*-2); sharp-tailed grouse, 103 (*N. Dak.*, Lower Souris Nat'l Wildlife Refuge); European partridge, 62 (*Man.*, Winnipeg); bob-white, 82 (*Ohio*, Canton); California quail, 1263 (*Utah*, Salt Lake City); Gambel's quail, 104 (*Ariz.* Imperial Nat'l Wildlife Refuge); mountain quail, 12 (*Calif.*, Pasadena); ring-necked pheasant, 217 (*Utah*, Salt Lake City); wild turkey, 59 (*Ga.*, Sherwood and Birdsong Plantations); sandhill crane, 150 (*Tex.*, Tivoli); limpkin, 4 (*Fla.*, Monroe); king rail, 1 (*Mass., N. C., Tex.*); clapper rail, 20 (*S. C.*, Charleston); Virginia rail, 6 (*Utah*, Salt Lake City); sora, 5 (*Calif.*, Calipatria); Florida gallinule, 51 (*Fla.*, St. Petersburg); Am. coot, 20,000 (*Va.*, Back Bay Nat'l Wildlife Refuge).

Am. oyster-catcher, 123 (*S. C.*, Charleston); black oyster-catcher, 5 (*Calif.*, Monterey Peninsula); piping plover, 8 (*Fla.*, St. Augustine); snowy plover, 63 (*Calif.*, Malibu); semipalmated plover, 37 (*Fla.*, St. Augustine); Wilson's plover, 29 (*Fla.*, St. Petersburg); mountain plover, 14 (*Calif.*, Calipatria); killdeer, 368 (*La.*, St. Francisville); black-bellied plover, 400 (*Calif.*, Oakland); surf-bird, 6 (*Calif.*-2); ruddy turnstone, 110 (*Fla.*, St. Augustine); black turnstone, 20 (*Calif.*, Los Angeles); woodcock, 4 (*N. J.*, Cape May); Wilson's snipe, 161 (*Oreg.*, Portland); long-billed curlew, 46 (*Calif.*, Salinas); Hudsonian curlew, 16 (*Calif.*-2); spotted sandpiper, 15 (*Fla.*, St. Petersburg); willet, 1000

(*Calif.*, San Diego); greater yellow-legs, 200 (*Calif.*, Calipatria); lesser yellow-legs, 6 (*Calif.*, Orange Co., coastal); knot, 32 (*Fla.*, Daytona Beach); purple sandpiper, 80 (*Mass.*, Cape Ann); Baird's sandpiper, 25 (*Calif.*, Salinas); least sandpiper, 850 (*Calif.*, Orange Co., coastal); red-backed sandpiper, 3771 (*N. J.*, Cape May); dowitcher, 337 (*Calif.*, Los Angeles); stilt sandpiper, 6 (*Tex.*, Harlingen); semipalmated sandpiper, 55 (*Tex.*, Harlingen); western sandpiper, 750 (*Calif.*, Orange Co., coastal); marbled godwit, 850 (*Calif.*, San Diego); Hudsonian godwit, 1 (*Fla.*, St. Augustine); sanderling, 294 (*Calif.*, Los Angeles); avocet, 500 (*Calif.*, Oakland); black-necked stilt, 12 (*Tex.*, Harlingen).

Glaucous gull, 5 (*Mass.*, Cape Ann); Iceland gull, 6 (*Mass.*, Cape Ann); glaucous-winged gull, 5396 (*Wash.*, Seattle); great black-backed gull, 775 (*Mass.*, Cape Cod); western gull, 862 (*Calif.*, San Francisco); herring gull, 15,000 (*N. Y.*, Brooklyn); California gull, 825 (*Calif.*, Los Angeles); ring-billed gull, 1936 (*Ohio*, Cleveland); short-billed gull, 1870 (*Oreg.*, Portland); black-headed gull, 1 (*N. Y.*-2); laughing gull, 177 (*Fla.*, St. Petersburg); Bonaparte's gull, 5367 (*N. Y.*, Buffalo); little gull, 2 (*N. Y.*, Buffalo); Heermann's gull, 160 (*Calif.*, San Diego); kittiwake, 5 (*Mass.*, Cape Ann); gull-billed tern, 9 (*Tex.*, Harlingen); Forster's tern, 170 (*Ala.*, Foley); common tern, 8 (*Fla.*, St. Augustine); royal tern, 175 (*Ala.*, Fla.); Caspian tern, 54 (*S. C.*, Charleston); black skimmer, 1643 (*Fla.*, Daytona Beach); razor-billed auk, 13 (*Mass.*, at sea off Monomoy Point); Brunnich's murre, 2 (*Mass.*, Cape Ann); dovekie, 1 (*Mass.*-3); black guillemot, 3 (*Mass.*, Cape Ann); pigeon guillemot, 1 (*Wash.*, Seattle); marbled murrelet, 1 (*Calif.*, Monterey Peninsula); ancient murrelet, 3; Cassin's auklet, 1 (*Calif.*, Monterey Peninsula).

Band-tailed pigeon, 329 (*Wash.*, Seattle); red-billed pigeon, 3 (*Tex.*, Harlingen); mourning dove, 348 (*Calif.*, *Ohio*); Chinese spotted dove, 98 (*Calif.*, Los Angeles); ringed turtle dove, 92 (*Calif.*, Los Angeles); ground dove, 85 (*Fla.*, St. Petersburg); Inca dove, 79 (*Ariz.*, Tucson); white-fronted dove, 16 (*Tex.*, Harlingen); road-runner, 5 (*Ariz.*, Santa Catalina Mts.); barn owl, 4 (*Calif.*, Marysville); screech owl, 11 (*Ohio*, Toledo); horned owl, 9 (*Ont.*, Hamilton); snowy owl, 2 (*N. Dak.*, *Que.*); pygmy owl, 2 (*Calif.*, Yosemite Nat'l Park); burrowing owl, 4 (*Calif.*, Calipatria); barred owl, 11 (*Tenn.*, Reelfoot Lake); long-eared owl, 4 (*N. Y.*, Buffalo); short-eared owl, 7 (*Utah*, Ogden); saw-whet owl, 1 (*Calif.*-2, *Iowa*, *Man.*, *Mass.*, *Mont.*, *Ont.*, *Utah*, *Vt.*); poor-will, 1 (*Calif.*, Pasadena); pauraque, 1 (*Tex.*, Harlingen); white-throated swift, 116 (*Calif.*, Los Angeles); Anna's hummingbird, 177 (*Calif.*, Los Angeles); belted kingfisher, 57 (*Fla.*, St. Petersburg); Texas kingfisher, 12 (*Tex.*, Harlingen); yellow-shafted flicker, 141 (*Tenn.*, Memphis); red-shafted flicker, 230 (*Oreg.*, Portland); gilded flicker, 17 (*Ariz.*, Santa Catalina Mts.); pileated woodpecker, 26 (*S. C.*, Charleston); red-bellied woodpecker, 67 (*Fla.*, St. Petersburg); golden-fronted woodpecker, 63 (*Tex.*, Harlingen); Gila woodpecker, 92 (*Ariz.*, Santa Catalina Mts.); red-headed woodpecker, 379 (*Okla.*, Tulsa); California woodpecker, 68 (*Calif.*, Pasadena); Lewis's woodpecker, 24 (*Oreg.*, Eugene); yellow-bellied sapsucker, 19 (*Tenn.*, Memphis); Williamson's sapsucker, 8 (*Oreg.*, Eugene); hairy woodpecker, 33 (*N. Y.*, Bronx-Westchester region); downy woodpecker, 126 (Washington, *D. C.*); ladder-backed woodpecker, 40 (*Tex.*, Harlingen); Nuttall's woodpecker, 11 (*Calif.*, Los Angeles); Arizona woodpecker, 3 (*Ariz.*, Santa Catalina Mts.); red-cockaded woodpecker, 12 (*S. C.*, Charleston); white-headed woodpecker, 3 (*Calif.*, Yosemite Nat'l Park); Am. three-toed woodpecker, 1 (*Mont.*, Fortine).

Couch's kingbird, 1 (*Tex.*, Harlingen); Cassin's kingbird, 4 (*Calif.*-2); derby flycatcher, 81 (*Tex.*, Harlingen); crested flycatcher, 1 (*Fla.*, Monroe); ash-throated flycatcher, 1 (*Calif.*-2); eastern phoebe, 56 (*Fla.*, Tallahassee); black phoebe, 159 (*Calif.*, Los Angeles); Say's phoebe, 30 (*Calif.*, Los Angeles); yellow-bellied flycatcher, 2 (*Tex.*, Harlingen); vermilion flycatcher, 18 (*Tex.*, Harlingen); beardless flycatcher, 1 (*Tex.*, Harlingen); horned lark, 1092 (*N. J.*, Cape May); violet-green swallow, 1 (*Ariz.*, Calif.); tree swallow, 2000 (*Fla.*, Monroe); rough-winged swallow, 7 (*La.*, St. Francisville); barn swallow, 5 (*Fla.*, Pensacola); Canada jay, 5 (*Mont.*, Fortine); blue jay, 390 (*Tenn.*, Memphis); Steller's jay, 108 (*Calif.*, Yosemite Nat'l Park); scrub jay, 164 (*Calif.*, Los Angeles); Arizona jay, 37 (*Ariz.*, Santa Catalina Mts.); green jay, 63 (*Tex.*, Harlingen); Am. magpie, 92 (*Mont.*, Billings); yellow-billed magpie, 101 (*Calif.*, Marysville); Am. raven, 38 (*Mont.*, Fortine); white-necked raven, 1 (*Tex.*, El Paso); Am. crow, 30,000 (*Pa.*, Allentown); fish crow, 342 (*Fla.*, St. Petersburg); piñon jay, 94 (*Colo.*, Lyons); Clark's nutcracker, 98 (*Calif.*, Big Bear Lake); black-capped chickadee, 464 (*Oreg.*, Portland); Carolina chickadee, 328 (Washington, *D. C.*); mountain chickadee, 208 (*Calif.*, Big Bear Lake); brown-capped chickadee, 2 (*Ont.*, Rutherglen); chestnut-backed chickadee, 147 (*Calif.*, San Francisco); tufted titmouse, 292 (Washington, *D. C.*); black-crested titmouse, 51 (*Tex.*, Harlingen); plain titmouse, 75 (*Calif.*, Pasadena); bridled titmouse, 19 (*Ariz.*, Santa Catalina Mts.); verdin, 61 (*Ariz.*, Santa Catalina Mts.); bush-tit, 626 (*Calif.*, Los Angeles); white-breasted nuthatch, 142 (Washington, *D. C.*); red-breasted nuthatch, 123 (*Calif.*, San Francisco); brown-headed nuthatch, 76 (*N. C.*, Wilmington district); pygmy nuthatch, 138 (*Ariz.*, Santa Catalina Mts.); br. creeper, 63 (*Ill.*)

Wren-tit, 241 (*Calif.*, Los Angeles); dipper, 9 (*Calif.*, *Colo.*); house wren, 46 (*Tex.*, Harlingen); winter wren, 43 (*Tenn.*, Memphis); Bewick's wren, 31 (*Oreg.*, Portland); Carolina wren, 153 (*Tenn.*, Memphis); cactus wren, 75 (*Ariz.*, Santa Catalina Mts.); long-billed marsh wren, 29 (*Utah*, Salt Lake City); short-billed marsh wren, 20 (*Md.*,

southern Dorchester Co.); cañon wren, 9 (*Calif.*, Pasadena); rock wren, 10 (*Ariz.*-2); mockingbird, 508 (*Tex.*, Harlingen); catbird, 21 (*Ga.*, Okefenokee Nat'l Wildlife Refuge); brown thrasher, 55 (*La.*, St. Francisville); Sennett's thrasher, 22 (*Tex.*, Harlingen); Bendire's thrasher, 6 (*Ariz.*, Santa Catalina Mts.); curve-billed thrasher, 77 (*Ariz.*, Santa Catalina Mts.); California thrasher, 56 (*Calif.*, Los Angeles); Leconte's thrasher, 1 (*Calif.* Big Bear Lake); crissal thrasher, 6 (*Ariz.*, Tucson); sage thrasher, 3 (*Tex.*, El Paso); robin, 125,940 (*Tenn.*, Nashville); varied thrush, 152 (*Wash.*, Seattle); wood thrush, 1 (*N. Y.*, Western Long Island); hermit thrush, 105 (*Calif.*, Los Angeles); gray-cheeked thrush, 1 (*Ohio*, Cincinnati); eastern bluebird, 255 (*N. C.*, Greensboro); Mexican bluebird, 166 (*Ariz.*, Santa Catalina Mts.); mountain bluebird, 281 (*Ariz.*, Tucson); Townsend's solitaire, 8 (*Ariz.*, Santa Catalina Mts.); blue-gray gnatcatcher, 82 (*Tex.*, Harlingen); plumbeous gnatcatcher, 4 (*Ariz.*, *Calif.*); golden-crowned kinglet, 344 (*Oreg.*, Portland); ruby-crowned kinglet, 138 (*Oreg.*, Eugene); Am. pipit, 700 (*Calif.*, Calipatria); Bohemian waxwing, 1820 (*Wash.*, Spokane); cedar waxwing, 345 (*Calif.*, Pasadena); phainopepla, 44 (*Ariz.*, Santa Catalina Mts.); northern shrike, 3 (*Nebr.*, Kearney); loggerhead shrike, 121 (*Fla.*); starling, 501,940 (*Tenn.*).

White-eyed vireo, 19 (*Tex.*, Harlingen); Hutton's vireo, 19 (*Calif.*, Marysville); Bell's vireo, 1 (*Ariz.*, Imperial Nat'l Wildlife Refuge); solitary vireo, 7 (*Fla.*-2); yellow-green vireo, 1 (*Tex.*, Harlingen); black and white warbler, 12 (*Tex.*, Harlingen); Tennessee warbler, 2 (*Tex.*, Harlingen); orange-crowned warbler, 57 (*Tex.*, Harlingen); Nashville warbler, 10 (*Tex.*, Harlingen); parula warbler, 1 (*Ga.*, Sherwood and Birdsong Plantations); olive warbler, 1 (*Ariz.*, Santa Catalina Mts.); yellow warbler, 9 (*Tex.*, Harlingen); Cape May warbler, 2 (*Fla.*, Monroe); myrtle warbler, 9653 (*N. J.*, Cape May); Audubon's warbler, 2212 (*Calif.*, Los Angeles); black-throated gray warbler, 1 (*Ariz.*, *Tex.*); Townsend's warbler, 11 (*Calif.*, San Francisco); black-throated green warbler, 6 (*Tex.*, Harlingen); yellow-throated warbler, 12 (*Fla.*, St. Petersburg); black-poll warbler, 1 (*N. Y.*, Smithtown, L. I.); pine warbler, 225 (*N. C.*, Wilmington district); prairie warbler, 11 (*Fla.*, St. Petersburg); palm warbler, 360 (*Fla.*, St. Petersburg); oven-bird, 1 (*Fla.*, *N. C.*); northern water-thrush, 1 (*Utah*, Salt Lake City); Kentucky warbler, 1 (*Tex.*, Harlingen); yellow-throat, 71 (*Fla.*, Monroe); black-capped warbler, 2 (*Calif.*, Pasadena); English sparrow, 63,000 (*N. Y.*, Brooklyn); European tree sparrow, 31 (*Ill.*, East St. Louis); eastern meadowlark, 608 (*N. J.*, Cape May); western meadowlark, 309 (*Calif.*, Pasadena); yellow-headed blackbird, 5000 (*Calif.*, Calipatria); red-wing, 2,000,000 (*Tenn.*, Reelfoot Lake); tri-colored blackbird, 30 (*Calif.*, Malibu); Audubon's oriole, 14 (*Tex.*, Harlingen); Alta Mira oriole, 1 (*Tex.*, Harlingen); hooded oriole, 3 (*Tex.*, Harlingen); Baltimore oriole, 1 (*S. C.*, Spartanburg); rusty blackbird, 8000 (*Ohio*, Portsmouth); Brewer's blackbird, 3869 (*Utah*, Salt Lake City); boat-tailed grackle, 2400 (*Tex.*, Harlingen); grackle (purple and bronzed), 50,017 (*N. J.*, Raritan Estuary); brown-headed cowbird, 75,000 (*Tex.*, Houston).

Cardinal, 387 (*Ky.*, Louisville); pyrrhuloxia, 31 (*Ariz.*, Tucson); rose-breasted grosbeak, 1 (*La.*, St. Francisville); dickcissel, 1 (*Mass.*, Northampton); evening grosbeak, 112 (*Oreg.*, Portland); purple finch, 886 (*Wash.*, Seattle); Cassin's finch, 23 (*Calif.*, Big Bear Lake); house finch, 2164 (*Calif.*, Los Angeles); Sharpe's seedeater, 75 (*Tex.*, Harlingen); pine grosbeak, 94 (*Man.*, Winnipeg); gray-crowned rosy finch, 100 (*Wyom.*, Kemmerer); black rosy finch, 73 (*Utah*, Salt Lake City); common redpoll, 108 (*Ohio*, Cleveland); pine siskin, 1259 (*Wash.*, Seattle); Am. goldfinch, 715 (*Calif.*, Marysville); Arkansas goldfinch, 239 (*Calif.*, Los Angeles); Lawrence's goldfinch, 85 (*Calif.*, Big Bear Lake); red crossbill, 11 (*N. H.*, Waterville Valley, White Mts.); white-winged crossbill, 21 (*Que.*, Quebec); Texas sparrow, 56 (*Tex.*, Harlingen); green-tailed towhee, 3 (*Ariz.*, Tucson); eastern towhee, 178 (*W. Va.*, Charleston); spotted towhee, 127 (*Oreg.*, Portland); brown towhee, 465 (*Calif.*, Los Angeles); Abert's towhee, 60 (*Calif.*, Calipatria); lark bunting, 40 (*Ariz.*, Santa Catalina Mts.); Ipswich sparrow, 7 (*N. J.*, Cape May); Savannah sparrow, 200 (*Calif.*, Calipatria); grasshopper sparrow, 4 (*Tex.*, Harlingen); Baird's sparrow, 3 (*Tex.*, Harlingen); Leconte's sparrow, 5 (*Tenn.*, Memphis); Henslow's sparrow, 2 (*Fla.*, *N. C.*); sharp-tailed sparrow, 27 (*N. J.*, Cape May); seaside sparrow, 8 (*Fla.*, St. Marks); vesper sparrow, 41 (*Ariz.*, Tucson); lark sparrow, 249 (*Ariz.*, Tucson); rufous-crowned sparrow, 15 (*Ariz.*, Santa Catalina Mts.); pine-woods sparrow, 4 (*Fla.*, St. Petersburg); Cassin's sparrow, 2 (*Tex.*, Harlingen); black-throated sparrow, 40 (*Tex.*, Harlingen); sage sparrow, 2 (*Calif.*, Calipatria); white-winged junco, 3 (*Colo.*, Sterling); slate-colored junco, 875 (*Ont.*, Hamilton); Oregon junco, 1789 (*Oreg.*, Portland); gray-headed junco, 20 (*Ariz.*, Santa Catalina Mts.); Arizona junco, 31 (*Ariz.*, Santa Catalina Mts.); tree sparrow, 1641 (*Pa.*, Reading); chipping sparrow, 400 (*N. C.*, Wilmington district); Brewer's sparrow, 30 (*Ariz.*, Santa Catalina Mts.); field sparrow, 440 (*Tenn.*, Great Smoky Mts. Nat'l Park); black-chinned sparrow, 16 (*Ariz.*, Santa Catalina Mts.); Harris's sparrow, 600 (*Okla.*, Salt Plains Nat'l Wildlife Refuge); white-crowned sparrow, 960 (*Calif.*, Los Angeles); golden-crowned sparrow, 115 (*Calif.*, Benicia); white-throated sparrow, 1271 (*Tenn.*, Memphis); fox sparrow, 90 (*N. C.*, Wilmington district); Lincoln's sparow, 83 (*Tex.*, Harlingen); swamp sparrow, 347 (*Md.*, Southern Dorchester Co.); song sparrow, 962 (*Oreg.*, Portland); Lapland longspur, 35 (*Kans.*, Baldwin); snow bunting, 2000 (*Wis.*, Green Bay).

Revised Instructions for Making a Breeding Bird Census

On their many Christmas Bird Counts, readers of *Audubon Magazine* and *Audubon Field Notes* have generally attempted to cover those areas containing the widest number of habitats yielding the richest and largest possible single day's list of birds in a 15-mile circle. The *Breeding Bird Census* is cut from a radically different pattern. In it, bird clubs and bird watchers make careful counts of breeding birds in the interesting habitats of their local regions. Many facts have already been accumulated on how the population densities vary, but so far, most censuses still pose problems the answers to which are not yet available. Solutions to some of these will eventually make a substantial contribution to ornithology and conservation.

Selection of Area. — *Uniform habitats typical of large regions are particularly wanted.* They should be easily recognized, preferably simple, and above all, clearly described. *No special merit lies in the reports of unusually high densities of very rare birds.*

At least one-half the value of each count will lie in the care with which the study tract is chosen. Virgin or climax habitats such as original prairie, virginia timber, and undisturbed desert areas or relict areas such as certain bogs, should have priority over all others since most of these are now rare or are fast disappearing and therefore should be censused before it is too late. If the observer is interested in determining annual fluctuations in bird populations, not directly caused by plant succession or by changes due to man, it is necessary to select habitats of this type which are mature and therefore stable. It is also desirable to determine the bird populations in the various stages of plant succession which precede the natural climax or mature habitats. Many of these stages are represented in habitats which are quite transitory in character so that it is only possible to census them for one or two years before major changes take place. Artificial or man-made habitats such as agricultural fields, orchards, all have characteristic bird populations and are well worth censusing.

The study area should, so far as possible, be restricted to a single uniform environmental type. Censuses should be taken on contiguous tracts of preferably *not less than 15 acres* or more than 100 acres in size. Observers desiring to census rare habitats of less than 15 acres should consult the census editor before initiating such field work. Decisions as to the best size can be based on: (1) the extent of uniform habitat available; (2) the man-power and time obtainable for observation; (3) the observational difficulties presented by the density of cover. Thirty acres of heavy forest are quite as much as the average beginner can census alone on week-ends throughout the season. Study area should be well within (near center or 100 yards or more from margin) a much larger area of the same habitat so that the edge effect can be reduced.

Manner of Counting. — The breeding population of any given habitat should be based primarily on the number of occupied territories in the study area. Ordinarily, each territory may be considered to represent one pair. Frequently only part of a territory is within a study area, in which case the fraction of the territory that is on the area would be considered the equivalent of the fraction of the pair represented, i.e., ½ a territory = ½ pair. These fractions should be used in calculating the density of pairs per 100 acres of habitat, but the final density figure should be taken to the nearest whole number. If the final density of a species is less than ½ a pair per 100 acres it should be indicated by a + sign instead of a number. The population of a polygamous species on the study area may be indicated by dividing the total number of adults with territories on the area by two. Unmated birds on territories should be evaluated as ½ pair each. Species not on nesting territories, but which are occasionally found on the area should be listed as *Visitors*, with the average density of *individuals* per 100 acres, indicated.

Counts should be conducted by marking each bird seen on a map of the study area. The simplest method is to lay out north-south and east-west lines that are 148, 209, 256, 295 or 330 ft. apart which will create a grid subdividing the area into ½, 1, 1½, 2, or 2½ acre units respectively. The choice of the distance between lines should be a matter of personal judgment depending on the field ability of the observer, on the type of cover to be censused and on the number of census trips to be taken. These grid lines are easily laid out any time before the leaves come out by using a compass with a rope or tape, or simply by pacing. Colored stakes, pieces of cloth, or paint on trees can be used to mark the lines and their intersections. One field map may be used for each species throughout the study, or separate maps may be used for each trip to cover all species. Each method has its advantages and disadvantages. If the latter method is used the field data should be transposed on species maps after the census taker returns indoors. When this is done, the records from different trips should be indicated by different colors or by dates. A special attempt should be made to record the locations of males that are singing simultaneously as this type of record is more useful than any other in helping to delimit the territories. Such records can be indicated on the field map by drawing arrows from the location dots which point to each other. After numerous records of this type have been obtained it is usually a simple matter to outline the territories. Locating nests is often very helpful in determining the number of pairs present, especially for wide-ranging species or for species in which the songs and call notes of the male and female are similar.

Time of the Census. — The dates on which counts are to be taken obviously vary according to geographical location. In New Jersey, for instance, eggs of the horned owl might be found hatching in February and those of the goldfinch in September. Most species are usually at the peak of their nesting activities during late May and June. Accuracy and thoroughness lie completely in the discretion of the enumerator.

At least eight different counts should be taken. Although the most productive days will be those when the majority of birds are building their nests or feeding young that have not yet flown, the nature of the time spent afield is as important as the number of days the area is visited. Cruises over a tract between 7 a.m. and 10 a.m. will, in some habitats, show about a 50 to 75 per cent efficiency in recording certain species. Where necessary, two night visits should be made to check for owls, woodcock and goatsuckers. Thrushes are most easily censused at sundown because of the frequency of singing at that time of day.

Reports. — The model census that follows is a purely synthetic one that has been designed to include the more important data on factors perceptibly influencing the character and density of bird populations. *Each census taker should follow the form closely* and report all birds present *in the order of their abundance*, and wherever possible, endeavor to give the same kind of information. Incorporated in each new census should be the scientific names of the predominant plants within the area, together with the name of the authority used as a source.

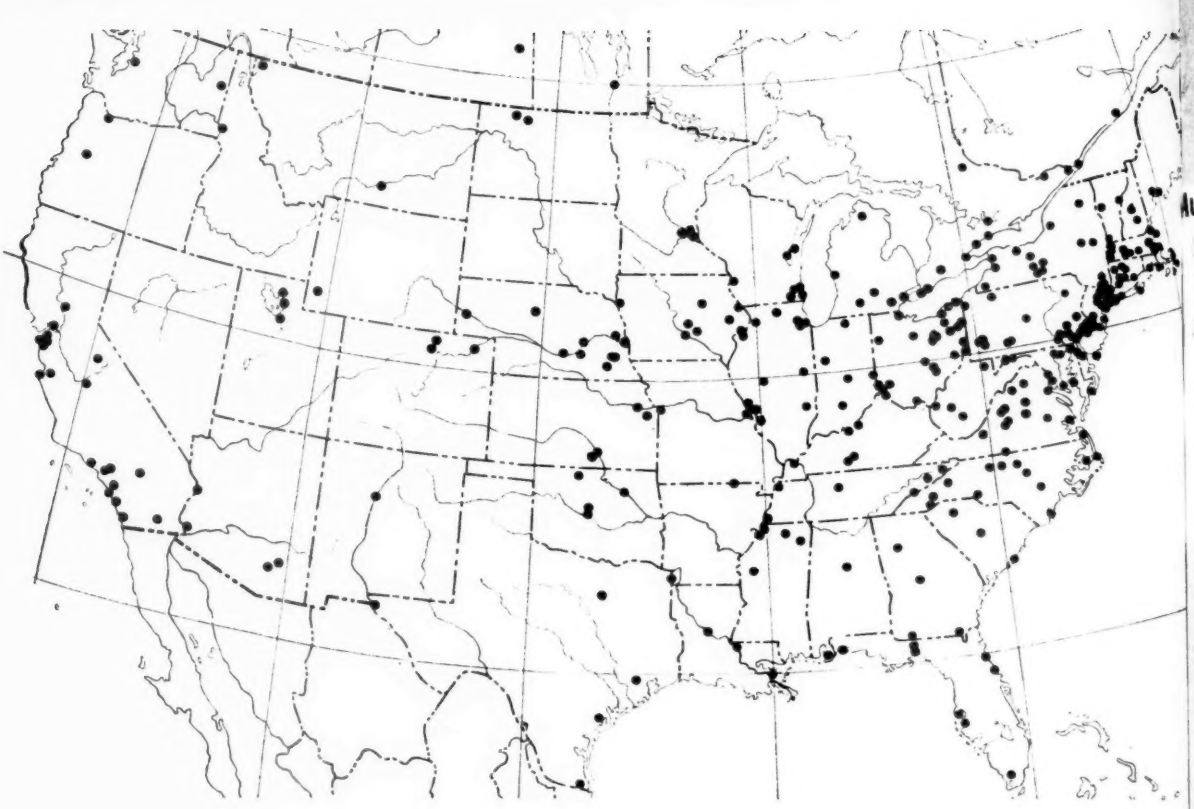
All censuses should follow the same use of symbols in the following order of priority: N = nest; Y = a pair seen feeding young; P = pair; M = male, generally singing on fixed territory and continuously observed throughout the season; F = female; EP = equivalent pair, which for polygamous species equals total number of adults divided by 2; and UM = unmated male (this symbol should be used only when it is positively known that the male is unmated). These symbols should be used to represent the classified basis for the number of pairs of each species in the study area, and should be placed in parentheses immediately following the figure representing the density per 100 acres. Thus in a 25-acre study area, a species might be indicated as follows: robin, 24 (3N, 1Y, 1P, 1M). This would mean that the territories of 6 pairs of robins were in the 25-acre study area. This figure would be equivalent to the density of 24 pairs per 100 acres. Of the 6 territories in the study area, nests were found in 3, resident young were observed being fed in one, one pair was found to be resident in another, and one male was resident in the remaining one.

Reports should be typed, if possible, double-spaced, and on one side of the paper only. Submit reports as a single paragraph, underlining nothing except scientific names. It is hoped to print censuses in tabular form at 5-year intervals to show cumulative totals, but such deviations now must depend on the discretion of the census editor and the amount of space available for the reports in a given year.

Maps. — Each census should be accompanied by one or more maps, 8 x 10 inches, in black ink showing boundaries of the study area, adjoining environment, scale, nests, centers of territories occupied by pairs of singing males, vegetational blocks, direction of north and enough landmarks so that the tract may be readily found by some other person wishing to census it in the future. Abbreviations should be used to indicate the occurrence of each species of bird on the map, symbols (P, N, Y, etc.) being added to each abbreviation. Census takers are urged to include photographs illustrating their study tracts; where space permits some of these will be reproduced in *Audubon Field Notes*.

Model Census. — Upland oak-hickory forest. Forest crown somewhat open with a sub-stratum of shrubs averaging 8 feet in height; typical woodland of southern Illinois; trees average about 50 ft. in ht. and about 1 ft DBH (diameter breast high); 50% white oak (*Quercus alba*), 30% black oak (*Q. velutina*), 20% beech (*Fagus Grandifolia*) about 2 dead trees per acre; no interference by man for at least 35 years; once used as a cornfield. Scientific names of plants taken from Gray's Manual. Size: 30 acres (330 x 440 yards paced). Location: Naghuna, Ill. Tract bounded on all sides by similar forest. Topography: Steep, rolling hills; elevation, 150 to 200 feet. Edge: boundary of area 150 feet from nearest edge. Coverage: April 10, 16; May 8, 11, 25, 27, 30; June 2, 5, 9, 12, 15; July 10, 20. Hours varied from 5:30 a.m. to 10 p.m., and totaled 53. Census: Red-eyed vireo, 22 (3N, 2P, 1.5M); summer tanager, 10 (2N, 1Y); red-bellied woodpecker, 7 (2P); cowbird, 5 (1.5 EP); wood pewee, 3 (1Y); blue jay, 2 (.6P); Cooper's hawk, + (.1P). Total: 7 species; density, 49 pairs per 100 acres (46 pairs in 1947). Visitors (average number of individuals per 100 acres): starling, 5; robin, 3. Remarks: Cowbirds were present in the area for the first time since the study was started, 5 years ago. The absence of barred owls this year was probably due to an increased amount of hunting in area last winter.

Supplementary Information. — Because of the great lack of information on the subject, all census contributors are urged to give facts, under the heading of "Remarks" in their report, on territory, size and the foraging range of the species on their study areas. Foraging ranges of a few species are to be found in censuses Number 16 and 27 in the September-October, 1944, issue of *Audubon Magazine*. Unusual numbers or any abrupt yearly change in population should also be explained, if possible, under "Remarks."



Distribution of the Forty-eighth Christmas Bird Count

INDEX TO COUNTS

Region	Count No.	Region	Count No.
Alabama	195-196	Missouri	244-247
Arizona	288-291	Montana	277-278
Arkansas	248	Nebraska	254-263
California	296-314	New Hampshire	20-21
Canada	4-17	New Jersey	73-82
Colorado	280-282	New Mexico	283
Connecticut	42-48	New York	54-72
Cuba	3	New York, Long Island	49-53
Delaware	103-104	North Carolina	129-140
Florida	148-155	North Dakota	252-253
Georgia	144-147	Ohio	156-178
Germany	1	Oklahoma	268-271
Hawaii	2	Oregon	294-295
Idaho	284	Pennsylvania	83-102
Illinois	213-225	Rhode Island	40-41
Indiana	208-212	South Carolina	141-143
Iowa	236-243	Tennessee	189-194
Kansas	264-267	Texas	272-276
Kentucky	184-188	Utah	285-287
Louisiana	249-251	Vermont	22-24
Maine	18-19	Virginia	115-128
Maryland	105-113	Washington	292-293
Massachusetts	25-39	Washington, D. C.	114
Michigan	202-207	West Virginia	179-183
Minnesota	233-235	Wisconsin	226-232
Mississippi	197-201	Wyoming	279